

# THE NORTH-WESTERN MEDICAL AND SURGICAL JOURNAL.

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VOL. II.]

JANUARY, 1850.

[ No. 5.

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## Part 1.—Original Communications.

### ARTICLE I.

*Case of Hypertrophy of the Heart, with Valvular Disease.*—By  
SAMUEL THOMPSON, M.D., of Albion, Ill.

On 11th June, 1846, J. B. negro, aged about 60, called at my office, complaining he was troubled with soreness of breast and constipation. In answer to enquiry as to the character of his stools, he described them as having been for some time past, "white." From the feel of the pulse, the expression of the countenance, &c., I told him I considered he had a disease of the heart. I was very busy at the time, and directed him to call again, giving him some active cathartics, combined with mercury, to remove the constipation, which was of course aggravating every symptom, and to act on the liver, evidently deranged, as demonstrated by the color of the alvine discharges.

On the 27th June, I saw him at his house. His shortness of breath, upon making any exertion, with dizziness, and distension of the frontal veins, had rapidly increased, with, in addition thereto, an inability to lie down. The pulsations of the heart were rapid, (I did not count them by the watch.)

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but so equal were the first and second sounds of the heart, that it conveyed the impression to the ear of beating double at each impulse, and imparted to the hand, applied over the chest, a strong thrilling feeling. The pulse was synchronous with the cardiac impulse, but *comparatively* very feeble. The impulse of the heart could be felt over the greater part of the thorax, and seen distinctly through all his clothes, even when at some distance.

Below the epigastrium, commencing even in the left hypochondrium, was a distinct and rather prominent tumor, extending from the inferior margins of the true ribs, about six inches downwards, and reaching across into the right hypochondrium. This tumor was extremely tender to the touch. He dared not eat or drink, except in the smallest quantities, from the fear of a pain of a darting, paroxysmal character, commencing on the left side and running round to the right, and apparently passing through this tumor, which always followed any deviation from this cautious abstinence.

The bowels were purged, but there was no amount of feculent matter discharged; the stools being composed of yellow, slimy water. The urine was scanty and very red. The tongue was pale and very broad. His legs and feet were anasarcous, partly, doubtless, from his inability to lie down; and when the pain was great, he was obliged to lean on the tumor to obtain any ease. The diagnosis I formed was Hypertrophy of the Heart, with obstruction of the mitral valves, and regurgitation as a consequence; thence obstruction to the return of blood from the lungs, and of course obstruction to the contractions of the right ventricle, and the portal and caval circulation.

The character of the abdominal tumor, and its tenderness on touch, yet relieved by *pressure*, appeared more in character with colicky distension of the transverse colon: at the same time, neither its feel, nor the sound on percussion, as far as he would submit to such, warranted that opinion; while the

circumstance of the long continued constipation to which he said he had been subject, made it just possible that it might arise from *fecal* accumulation in the transverse colon.

I put him upon pills of Blue Mass and Extract of Conium, with a combination of Digitalis, Squill, and Cream of Tart., as palliative means only, feeling quite sure that the disease was far too much advanced for any chance of cure. It had evidently, from the account of himself and family, been growing for years, succeeding to several neglected attacks of Rheumatism.

On the 2d July I saw him again, when my worst fears were fully confirmed; and I then cautioned his family never to leave him alone, as his death might occur at any time without a minute's warning.

On the 14th he died suddenly in his chair, while seated under a peach tree at his cabin door. I had strongly urged upon the family, in the event of his death, to allow me to open his body; and aided by their curiosity, and that of their neighbors, to understand the cause of such, to them, strange symptoms, I obtained a partial permission: and having bribed a little boy to let me know as soon as he was dead, I received immediate notice, and went down the next morning with my then student, now Dr. Hugh Ronalds, and about 12 hours after death made a post mortem examination, of which the following were my notes. It will perhaps be remarked that I ought to have bled him. I thought so then and afterwards, but he was very low and unwilling:

*Autopsy.*—The surface of the body was hardly cold—the internal parts were warm. The vessels of the skin were much engorged with fluid blood; so that the flow from several veins, after dividing the integuments of the chest, was quite troublesome. The liver was of great size, apparently normal in structure, and full of blood. The left lobe was rather firmer than usual. The right one was attached to the side and diaphragm by nearly its whole superior surface. The

*Lobulus Spigelii* was of the size of a large duck egg. The gall bladder was much thickened, its parietes being about  $\frac{1}{4}$  of an inch through, and containing about 3 ij of thick, dark reddish brown bile. The stomach appeared healthy, but the coronary veins were distended with blood. The Duodenum was thickened and felt granular on its mucous surface; but there were no appearances of recent inflammation. *The Colon was much contracted*, and the small intestines were injected and of a pink color. The Omentum was nearly destitute of fat, but the mesenteric glands were very large, and hanging in some places by distinct footstalks. All the veins of the face were injected. The Spleen was very large and firm.

In the Thorax, the left lung was healthy, but pale; with some slight hypostatic engorgement on the posterior side. The right lung was also pale, with some few adhesive bands, of old date, between the costal and pulmonary pleuræ. On the anterior edge of the lung were some few emphysematous bladders, about the size of kidney beans. Both the thorax and abdomen were full of yellow serum, and the pericardium contained about 3 ij., or 3 iij. of fluid. To the pressure of the effused fluid I attributed the pale color of the lungs. The heart was very large, and weighed without the pericardium, (but with the dilated pouch of Aorta about two inches long attached) after it had been washed clean in water, then immersed in alcohol, and held up to drain before weighing, one pound six ounces avoirdupois. The right ventricle was rather large and thin—its walls being in many places not more than two lines thick. There were clear white fibrinous concretions interwoven with the chordæ tendineæ, and also some clots of blood between the fleshy columns. The tricuspid valves were normal, as also those of the pulmonary arteries. The left ventricle and auricle, the aorta, and the rest of the large vessels, were full of blood. The coronary veins were full of fluid blood, and so much distended as to equal in size a man's little finger. The muscular pillars were of enormous size



and strength. The mitral valves were entire, but greatly thickened and very white, while the free edges felt cartilaginous. The semilunar valves of the aorta were much diseased; one having its free edge pretty much in a normal condition. One was much ossified. The other was converted into solid, ragged cartilage, with a sort of fringed edge, and with bony, pea-like depositions beneath, and also united to its inferior edge. The osseous or cartilaginous matter, for it was difficult to decide to which it most truly belonged, appeared to be deposited within the true structure of the valves, and thus bulging out the membrane and changing their normal size and form. The depositions extended even below the origin of the valves, but the membrane was not, as I could see, abraded. The greatest amount of disease appeared to be where the superior angles of the valves approximate. They were at that place pretty much fused together, and so contracted the opening into the aorta, that the point of my little finger would not begin to pass up through the orifice; and when the canal of the aorta was laid open above, it presented a conical, and almost crater-like opening of about  $\frac{1}{4}$  of an inch in diameter. The aorta above was very much dilated and very thin. The walls of the left ventricle were, at their thickest parts, about one inch through, and on the pericardial surface of the left ventricle, were some small fibrinous bands of old date, (being fully organized) uniting it to the pericardium. There was also a small patch of the same kind on the right ventricle.

Here was a case, clear in the distinctive marks of the principal, and what may be called the primary lesion: for unless we look upon the rheumatic attacks of former years, as the primary error, I think all other derangements of either structure or fusion, may be clearly traced to the cardiac disease. The hepatic hypertrophy—for engorged as the liver was, it was certainly, also, I believe, increased in actual substance—the hypertrophy, then I say, must surely be recognised as the re-

sult of an undue mass of blood retained in its vessels. But taking this to be its cause, how shall we describe it as hypertrophy which implies excess of nutrition, unless we are prepared to allow that venous blood in its transit to the heart can supply nutrition, and that the veins are capable of secreting like arteries? Yet we know that in one sense the portal veins do secrete. That the hypertrophy or increased growth could not have been the result of excessive arterial supply, is evident from the obstruction of the aortic orifice: and though it is fair to suppose, that by its increased efforts, the left ventricle succeeded for some time in distributing over the body, the whole of the blood returned to it by the pulmonary veins, still it was evident, (and is, I believe, in such cases generally evident to the finger on the pulse,) that the arterial circulation was embarrassed.

I make these remarks without designing to base any theory; but as reflections occurring to my own mind from the facts herein presented: for either the excess of nutrition must have been supplied from the blood of the portal circle, or by virtue of a most exalted condition of the powers of assimilation, have been derived, from a certainly not *more* than common supply of arterial blood; or else, as Andral suggests, from deficient activity in the absorbents, (the deassimilating powers) have been dependent on *their* failure to carry off those materials it is their function to remove; and thence an accumulation took place. But if we admit this as a cause of the hypertrophy, we need borrow a term from Dr. Barlow's Treatise upon Plethora, and designate it as "Excrementitious" Hypertrophy, as of course the effete and exhausted molecules are all the absorbents, (be they veins or lymphatics,) ought to remove: and of such only, as result of their failure in function, could the redundancy be composed. The whole, however, appears pretty much beyond the grasp of our present knowledge, for as Dr. Townsend well remarks, "If we cannot comprehend how muscle or bone are formed from the blood in

their due proportion, it need be no matter of surprise, if we cannot explain how these substances are occasionally formed in excessive quantities." I would suggest, however, whether the known fact that veins in a state of plethora absorb but slowly, if at all, while depletion, by lessening their contents, raises their absorbing power to the highest grade, may not possibly furnish us some ideas upon the subject; adopting of necessity as therefrom resulting, Andral's suggestion, and calling to our own aid the observations of Dutrochet. We may perhaps yet discover that in venous tubes, in a state of great congestion, exosmotic may take the place of endosmotic currents, as in fact we see occur in dropsical effusions from obstructed venous circulation in the extremities, &c., and bearing in mind the peculiar character of the blood of the portal circle, loaded with newly ingested aliment, we may perhaps allow that a nutritive effect, though of an abnormal character, may result. The peculiar mode of distribution of the portal veins, assuming the arterial character of subdivision instead of convergence, in their course towards the heart, may also have an important bearing. For why arteries should secrete and veins absorb, we do not know. We know it is a fact, and we assume that it depends on peculiar nervous influences; but may it not possibly in some measure at least, depend on the subdivision they undergo; increasing their area, and thereby slackening their currents? whereas in veins, in general, the area decreases as the size of the trunks increases, and the velocity of the current is accelerated thereby. If there is any thing in this as a cause of arterial secretion, the same will hold good in reference to the portal veins; and we do know, that peculiar as they are in their mode of distribution, they are also peculiar in secreting, viz: the bile. All this is theorizing, I admit; but still, on some matters, till better informed, reasoning on facts we know, and thence deducing explanations of what we do not understand, is cer-

tainly allowable, and I think philosophical; Dr. Bartlett to the contrary notwithstanding.

That the hypertrophy of the *heart* must also have arisen in spite of obstructed circulation in the coronary arteries, and ~~without~~ any peculiarity in its venous blood or venous subdivisions, has to be borne in mind in reasoning upon this matter: at the same time I would remark, that the enormously increased muscular efforts of the heart in the disease above described, may possibly have enabled it to appropriate nourishment more rapidly from a common supply of blood. But to return to the record. The injected condition of the duodenum, the serum in the thorax and abdomen, are all clearly traceable to the impossibility of the left ventricle emptying its contents through the diminished orifice of the aorta, and its consequent inability to receive the supply sent by the right ventricle through the pulmonic system; hence the right ventricle became unable to propel its charge, and in its labored efforts so to do, became dilated, and also ruptured the pulmonary vesicles, producing the emphysematous blisters described, while the whole of the portal circle was in like manner dammed back, and the circulation passing by the superior cava was from the same cause obstructed, as was manifest in the distension of the frontal veins, and possibly was the cause of his sudden death, by pressure on the brain. (The head was not examined.) The case was remarkable as showing how the constitution seems able to accommodate itself to such important injuries, up to a certain point; for this man had, till about a month before his death, gone about his business, and only twelve months before, was chopping fire-wood for me, though at that time I remember he told me "his breath often failed him now." It was remarkable also, as an instance in a rather spare man, of a heart of nearly three times its normal weight. It was remarkable, I think, because that while defective action in the mitral valves alone would have given rise to regurgitation into the auricle, so great an obliteration

of the aortic orifice inevitably doubled that effect, and thus of course produced not hypertrophy alone, but hypertrophy with dilatation; the latter effect being a mechanical, the former a vital operation. A more minute examination of other organs was not allowed. The heart I have as a wet preparation.

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## ARTICLE II.

*Essay on Trembles, alias Animal Poison--A Paper read before the Æsculapean Society--By Dr. J. M. LOGAN, of Palestine, Illinois.*

I have selected this endemic of the West as the subject of the present essay, rather for the purpose of eliciting inquiry, observation and facts relative to the cause, nature and treatment of this disease, than of attempting to establish any preconceived opinion or theory of my own, or any that may have been previously published.

It is not deemed necessary to enter into a lengthened detail of arguments to prove the existence of this malady. A statement of a few facts is all that I will attempt here: and the first is, that there are certain locations in various parts of the western country, that have been from their first settlement, and still continue to be, subject to this peculiar disease; whilst other locations, hard by, have always been exempt. Second, wherever this disease prevails in the human species, the lower animals are liable to a peculiar and fatal disease called *Slows* or *Trembles*. Third, that in the human species the disease is of some specific poison, obtained, in most cases, from the milk or flesh of animals, which have fed on these infected lands. What is the local cause or specific virus which in-

vades these districts, inducing the disease, we do not know ; as no two that have experimented, or written upon this subject, agree. Some have attributed it to the *Indian Hachy*; some to one of the species of *Rhus*, and some to another ; some to the various other products of the vegetable kingdom. Others contend that it is of mineral origin; and others that it is an aerial poison. But as long as the subject remains a matter of doubt, it becomes no one to affirm positively, that the cause of this malady is or is not vegetable, 'mineral,' or aerial poison. It is certainly true that animals feeding on lands infected, at certain seasons, under certain circumstances, will be attacked with the disease ; but this does not prove that it is of vegetable origin : nor does the fact that this disease prevails most generally during, or immediately after a drought, prove that it is of mineral origin, or in the water.

But that this disease is not a species of congestive fever, generated by peculiar atmospheric miasma, may rather be inferred from the minute similarity of all the various cases, occurring at all periods of the year, under very varied circumstances ; and from the facts that in nearly all the cases in the human subject, the cause can be traced to its animal origin ; and that this disease is only known in the region of country where animals are subject to the *Slows*.

The strongest argument for the vegetable origin of the virus producing this disease, is the known fact that carnivorous animals have the disease only after preying upon the carcasses of graminivorous animals that have died of the disease.

I have seen several cases caused by eating beef, and butter; and still more by drinking milk ; and I have witnessed only two cases where the poison had not been from using either; and of these cases I have never been satisfied as to the cause. They lived in an infected region, but had no cow ; and in answer to interrogations, stated they had not eaten beef or butter, as they were unable to buy : but it has been suggested to me that they might have eaten milk with the neighbors;



for during the same season there were some twenty head of cattle died within a mile of them, and some three or four cases of the disease that could be clearly traced to animal origin.— In one instance, to illustrate this fact, Mr. W., whose wife had had the disease the previous fall, put up his cow in a small lot near his house, fed her on corn, and watered her from his well. After she had been up some weeks, Mr. W. was attacked with the disease very violently, and two days after, two of his children were taken down, and in two or three days after, two more were taken down. They were then advised to cease milking the cow, which appeared healthy. The cow, in a few days, began to show marks of disease, and died in a week. The dogs that preyed upon the carcass had the *slows*, and some died. Buzzards that fed upon it were unable to fly; thus proving that the cause of the disease was derived from the milk and flesh of the cow. In the meantime Mrs. W. was taken violently, and the other members of the family were all more or less affected.

Numerous other cases could be cited, proving the same point; but I will not impose upon the patience and time of the society so far as to narrate them; but will proceed to the diagnosis and treatment of this disease, which to the practitioner are more interesting and important.

There are two forms in which we meet with this disease; the acute and sub-acute or chronic. To the first the name of *milk-sickness* is usually given, and to the latter, the appropriate title of *slows*. They are, however, the same disease, produced by the same cause, and each form liable to be transformed into the other, and differing only in degree. In the sub-acute form, the individual is languid, unable to make any exertion of body or mind, appetite variable, bowels rather torpid, palpitation of the heart, some degree of stiffness of the limbs, trembling, and sickness of stomach if any considerable exertion is made, or if taking food is deferred beyond the usual time. This state of things may exist for months after the



cause is once introduced, unless removed by the sanative efforts of nature, or by a proper course of remedial treatment: or it may be transformed into the acute form by long fatigue, fasting, or over exertion, and in some instances by neglecting the bowels, or suffering them to remain constipated for some days.

When the disease assumes the acute form, the individual is seized suddenly with nausea, faintness, and prostration: surface and extremities below the natural temperature—sometimes cold and clammy, great distress and anxiety depicted in the countenance, and the bowels almost universally constipated.

The heart and large arteries beat with violence, whilst the pulse at the wrist remains almost natural. Excessive vomiting, with insatiable thirst, and in most cases a craving for alcoholic liquors. No pain or tenderness over the region of the bowels. The tongue is in most cases but slightly coated, or changed from its natural appearance. Breathing is like that of a person under the influence of a nauseating dose of ipecac, or tartarized antimony. No vermicular or peristaltic motion of the bowels can be perceived. A complete retroverted action of the stomach comes on, and at every effort of vomiting a fluid is ejected of variable appearance; it is sometimes colorless, and at others it is like soap suds, and at others it is like indigo water, and in the last stage of cases that terminate fatally, it is of a dirty brown with a dark colored sediment. But in all it has the peculiar smell of the disease; and is generally represented by the patient as having a sweetish and most sickening taste.

Vomiting comes on at regular intervals, and is so violent that every article of diet, drink or fluid medicine is ejected. During the intermission of vomiting, the patient usually lies on his back, tossing his limbs about, and sometimes in a partially comatose state, but is at all times easily aroused

when spoken to; and when interrogated as to his feelings, his only answer is, "O, I am so sick!"

The amount of fluid matter ejected in violent cases, is enormous; and in cases that terminate fatally, the irritability and retroverted action of the stomach continue until death closes the scene. In some cases the patient will occasionally complain of wandering pains in the limbs; and in some cases there is a cramping of the muscles of the limbs.

*Prognosis.*—When the disease is overcome by proper remedial agents, the heart and large arteries begin to return to their natural pulsations. The irritability of the stomach subsides, and the vermicular motions of the intestines can be perceived: the skin and extremities take on their natural heat, and after a thorough purgation of the bowels the patient generally recovers speedily.

The treatment of the chronic form of this disease, consists in purgatives and stimulants. In recent cases one or two doses of Cook's pills, followed with salts or oil, will be found sufficient, with stimulants; but in cases of long standing more purgatives will be required, and it will expedite the cure to begin with a few doses of calomel alone, or combined with rhubarb or jalap. In both forms of the disease alcoholic liquors can be taken in large quantities, without producing any intoxicating effects, and are of much importance as remedial agents. In the acute form of the disease, calomel in large doses, combined with opium, is most likely to be retained, and best allays the irritability of the stomach; and I have never been able to perceive that opium prevented the cathartic effect of calomel, but have thought that it rather promoted it. The calomel should be repeated every four or six hours until the bowels are evacuated; and in cases of extreme irritability, it will be best to give smaller doses and repeat them immediately after each attack of vomiting, so long as any of the medicine appears in the ejected fluid.

After the bowels have been moved, (and in cases of great prostration before,) spirits, brandy, whiskey, or hot toddy, should be freely administered. Sinapisms and blisters should be applied early in the disease, if we wish any benefit from them. I have bled in a few cases, but never with any marked advantage. Stimulating injections are often serviceable in promoting the action of the bowels.

When the stomach will bear it, a full dose of castor oil, combined with spirits turpentine will act beneficially after calomel. In one or two cases I have removed the constipation with 20 grs. Tartarized Antimony dissolved in a quart of warm water, as an injection, after calomel, salts, croton oil. and oil and turpentine had proved ineffectual.

After the bowels have been partially restored to their natural action, flowers of sulphur is preferable as an evacuant, to the neutral salts or oil. In some instances, when the constipation of the bowels is overcome, and the vomiting ceases, there is a strong tendency to a low typhoid state, requiring the free use of tonics and stimulants; and in some rare cases reaction supervenes, requiring an active course of treatment, which cases should be treated according to the indication of prevailing symptoms.

During convalescence the bowels should always be kept open by mild laxatives, and great care taken not to overload the stomach, as more relapses occur from the neglect of these than all other causes. I have seen no theory as to the *modus operandi* of this virus, and it may not be deemed out of place for me to speculate on this point, leaving the field open for your views, criticism and remarks. And first it does not act on the stomach like lead or arsenic, as its effect is not usually made manifest until it has been taken up by the absorbents; for in a large majority of cases the symptoms of disease are not developed for some days after the poison has been received into the stomach. The first symptoms of disease are not pain, or sickness at the stomach, or gastric derange-

ment; but weakness, stiffness of the joints, and palpitation of the heart. From this, we might infer that this virus, after being taken up into the circulation, acted specifically on the nerves of motion, producing a partial paralysis or weakening of the motor nerves and the capillary vessels, and stimulating the nerves of the heart and stomach, producing the violent action of the former, and the retroverted action of the latter. Thus it may be that cathartics cure, rather by stimulating the nerves of the intestinal canal, and exciting the natural secretions, than by removing the poison, which was the original cause of the disease.

Thence it is that the most powerful stimulants appear to act beneficially, notwithstanding the violent action of the heart and large arteries contra-indicate all stimulating remedies. It is our misfortune that popular prejudice is so averse to post mortem examinations; and consequently we are unable to speak from actual observation of the organs or tissues that are in a normal or diseased condition in this disease, and we must patiently await the time when public opinion will awake to the true interests of medical science and humanity.

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### ARTICLE III.

*On the Use of the Etherial Solution of Gun Cotton as an External Application in Erysipelas.*—By J. W. FREER, M.D., of The Grove, Cook Co., Ills.

HAVING made use of the adhesive liquid plaster as an external application in erysipelas, with the most gratifying success, I thought it not improper to make known the results.

An epidemic of the above named disease prevailed in our

vicinity last Spring, and annoyed me not a little, to find external remedies to alleviate the smarting, burning pain of the inflammation, and to prevent it from spreading over the surface. Reasoning from the fact that such inflammations are usually superficial, involving principally the capillary system of the cuticle and subcutaneous tissues, it seemed reasonable to suppose that any substance which would, after application, contract, thereby expelling the superabundance of blood from the part, would of course lessen the pain and irritation.—After experimenting, my anticipations were fully realized.

The first trial was upon a boy about 10 years of age. The inflammation commenced at the nose, and continued to travel until it had involved the whole of the face, scalp, neck, and finally passed down the back—ultimately uniting in front.—The pain and irritation resulting from the inflammation, added to the constitutional symptoms, made the case appear quite hopeless. At this period the solution was applied by means of a feather over the whole of the recently involved surface, and immediate relief was given. The inflammatory redness disappeared, and a firm coating was given which entirely protected the parts from the air, and the contact of clothing. The patient soon began to recover rapidly.

Afterwards I tried it in many instances with like success, with this addition, that no case afterwards traveled beyond its limits at the time of application. I do not presume to say that the spreading was prevented by it, for the inflammation might not have gone beyond those limits without its agency. Since then I have had occasion to use it in other affection, the most important of which are burns. It forms a firm coating, excluding the air, and almost instantaneously relieving the pain. In common inflammation, from whatever cause arising, its application seems to promote a termination by resolution, acting upon the same principle as in erysipelas, that is by squeezing, as it contracts, the fluids from the parts, thereby reducing the morbid action.

## ARTICLE IV.

*The Nitrate of Silver in Sub-Acute Dysentery.*—By W. MATTHEWS, M.D., of Eberle, Indiana.

J. P. L., the subject of the disease, aged 27 years, was of good constitution, and, with the exception of an occasional excess at the table, of temperate habits. Three weeks prior to the date of this report, he was attacked with acute dysentery—the exciting cause apparently being over eating. Although the attack was very severe, the discharges being frequent, slimy and bloody—tormina excruciating, and tenesmus exceedingly distressing, and the stomach rejecting everything taken into it, he had no efficient medical aid for near two weeks. At this time I took charge of the case and treated it on general principles—with calomel and opium, the sugar of lead, and epispastics, but without permanent good effects; (the patient was wretchedly nursed,) and at the expiration of three weeks, the following were the

*Symptoms.*—Pulse, about 80, small and quick; tongue brown and dry, with raw, florid edges; urine, scant and red; skin dry, and the whole surface exsanguineous and shrunken; thirst; stomach irritable, with complete anorexia. The stools were frequent, and consisted of a dark brown, jelly-like matter; and they were extremely fetid; or rather, they gave off “a peculiar sickening odor.” The patient was racked with tormina and tenesmus. His abdomen was flat and retracted and upon firm pressure being made over the tract of the colon, pain was elicited.

*Diagnosis.*—Extensive Ulceration of the Colon.

*Treatment.*—℞ Nitras Argenti, grs. 2; Opium, grs 8; form into sixteen pills—one to be taken every six hours. When I  
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next visited the patient, (forty-eight hours afterwards,) nine of the pills had been taken, and I was agreeably disappointed in finding a very manifest improvement was going on—no unfavorable symptom appeared to be slowly yielding. The pulse was fuller, the tongue cleaner and more moist; the stools less frequent, and inclining to be more natural; and the tormina and tenesmus were greatly relieved. The patient expressed himself as feeling “much better.” The Nitrate was now discontinued, and the opium directed to be continued.—But, two days after, when I made my next visit, I was mortified at finding the patient relapsed into his former hazardous state. He was again put upon the silver and opium, and this combination, in gradually decreasing doses, was continued for about ten days, at the end of which time I had the satisfaction of being able to pronounce the patient fairly convalescent; and, although badly nursed, he required no farther treatment, but went on gaining strength, until in three weeks he was able to walk abroad.

*Remarks.*—Under the ordinary mode of treating sub-acute dysentery, I feel very confident that this patient would have succumbed. It is to be presumed, that in such cases as the above, the beneficial effects of the nitrate of silver are attributable, first, to its local stimulating action over the indolent ulcerations of the mucous surface; and, secondly, to the genuine tonic influence which it is capable of exercising over the various enfeebled organisms. Although it is not a new remedy, having been highly extolled by several eminent physicians in the cure of dysentery, particularly that form which accompanies typhoid fever, (dothinerteritis,) and which depends upon ulceration—it is to be regretted that the nitrate of silver is so much neglected by the great mass of practitioners in the management of the several varieties of sub-acute and chronic lesions of the membrane of the alimentary canal.



## ARTICLE V.

*Preparation of Mercurial Ointment.*—By CHARLES BRACKETT, M.D., of Rochester, Indiana.

Noticing an article in one of your last Journals, on an improved method of making Mercurial Ointment, and knowing my way to be much superior in regard to the saving of labor, I am induced to send it you, to use as you may see proper.

To make either the Blue Mass, or Ointment, it is necessary only to apply a low degree of heat to the Confection of Roses, or Lard, before the Mercury is added; then add the metal, and triturate briskly, in a glass, or Wedgwood's Mortar, for twenty or thirty minutes. By this time the metal is so reduced that its globules cannot be distinguished by a glass magnifying four or five times. This is the plan I have followed for the last three years; and I am convinced of its efficacy. I thought when I hit upon the plan, (which I did by accident by shaking up some mereury in a jar, containing some old ointment, which I had warmed for the purpose of getting it out,) that probably the heat dispelled the metal, but I have since carefully weighed the ingredients after being made, and have found the weight the same after admixtion, as before. I simply warm part of the lard sufficiently to make it semi-fluid, then add the metal.

## ARTICLE VI.

*Asthma Cured by External Applications.*—By Dr. WM. TOWNSEND, of Royal Centre, Indiana.

MESSRS. EDITORS :—

In looking over my diary, I find the following cases of Asthma :

1. Mrs. —, aged 25 years:—had suffered at times for seven years. After using, at different times, all the remedies laid down by Drs. Eberle and Watson, some of which proved palliative, but not curative, I purged well with Senna and Salts, and applied over the lower part of the breast, a plaster made of portions of Burgundy Pitch and Rosin, with sufficient tallow to bring it to a consistency to spread. This was sprinkled with Pulv. Opii and Gum Camphor, and was worn for three weeks, and it is now worn two or three days every four weeks. Two years have now passed, and there have been none of the symptoms of the Asthma, since the first application of the plaster.

Case 2. Mrs. —, aged 44 years: Had suffered for 4 years, at intervals. On the 4th of March last, I was called in haste to see her. I found her suffering beyond description, and from Idiosyncrasy, opium could not be used. I directly had a poultice made of corn meal, and applied over the breast and stomach, which, after being renewed two or three times, gave relief. I then purged with Senna and Salts. On the 5th, I found her with some of the symptoms of Asthma, and some suffering. I applied the above plaster, and kept her bowels in motion with Senna. She wears the plaster as the former patient did, and has had none of the symptoms since the first application.

## ARTICLE VII.

*Tartar Emetic, Quinine and Morphine, in Pneumonia of Miasmatic Districts.*—By E. C. BANKS, M.D., of Lawrenceville, Illinois.

Of course, I do not mean to say, but what Mercury, in some form, must precede, accompany, or follow the administration of these medicines, as a general rule, to a greater or less extent. Indeed, hardly a case occurs, in the treatment of which, Mercury could advantageously be dispensed with. In thus openly advocating a course of practice not generally adopted by the faculty, nor even recommended by the learned and scientific of the profession, I lay myself open to criticism; yet I am glad to find one man, (Dr. Howland,) who openly advocates a similar course of treatment. I have long been tempted to give the result of my experience in the treatment of this Protean Malady, but have still held on, in hopes to mature my opinions on the subject, and if possible, come across the writings of some one, who corresponded in opinion with myself on this interesting subject. I have at last found that man, in the person of Dr. Howland, of Ottawa, Ills., writing through the columns of the "North-Western Med. and Surg. Journal" for April and May, 1849. I have never seen any thing like this treatment advised in any of the scientific works of the day, nor even in any of the periodicals, until I saw it in your valuable Journal.

The great mortality attending the accustomed mode of treatment, and the one sanctioned by the learned in all the medical works of the day, necessarily caused me to cast about to find some more successful mode of treating the different forms of Lung Fever, prevailing so extensively throughout this section during the months of February, March, April, metimes May, I found Quinine would, as a general

thing, cut short an attack of Pneumonitis, given after the patient's system had become prepared by general or local blood-letting, and mild purgatives of either Calomel and Rhubarb, Calomel and Soda, or Calomel and Jalap, with frequently a small quantity of Ipecac combined with either of these, and followed by the common Tartar Emetic solution, in Elm-water, till the more violent symptoms were reduced. But I often found cases, where the patient was so violently taken, or where I had not been called till so late in the disease, that before the patient's system could be prepared, either by general or local depletion or mild aperients, followed by the judicious use of Tartar Emetic, during the height of each paroxysm, that for the administration of Quinine the golden moment had forever flown. These cases I also found were quite frequent. Again I have pushed the old treatment with every possible alacrity, caution, and judgment, of which I was capable, for days, without any abatement; when I at once resumed—taking advantage of the remissions—the use of large doses of Quinine, and with the immediate alleviation of the symptoms: and from that moment my patient would commence rapidly to recover. I also noticed the fact, that patients afflicted with Lung Fever, and treated with Quinine, premising other proper treatment, always recovered more rapidly, than under any other mode of treatment I had ever used. I also found the most marked benefit from its use, even where the redness of the tongue, burning of the stomach, with great thirst, and excessive purgation, seemed to forbid its use. In fact, I have given it, combined with Morphine, when the patient complained of extreme tenderness in the region of the stomach and bowels, retching to vomit; red, dry, and coated tongue, great thirst, and frequently excessive purging therewith, with the happiest effect in Pneumonitis. Yet, as a general rule, I would advise caution in its use, when such irritation of the stomach exists as a complication with Pneumonitis; and especially in the

earlier stages of the disease. Still, in the latter stages, carefully observing the effect of it on the system, I have no hesitation in recommending its use, properly combined.

The result in the above cases, led me to try the virtues of this all-powerful medicine, in the earlier stages of Lung Fever, and before the system had time to become prepared as usual, for its reception; consequently I combined it with Mercury, Ipecac, and frequently Morphine. Sometimes using Dover's Powders instead of Ipecac and Morphine, where the patient seemed in the greatest danger, and with the effect of immediate relief. Often I would use the above combination during the intermission, or remission, and leave off as the hour for the rising of the fever had arrived, and have recourse to the Tartar Emetic in Elm-water, leaving off this whenever a remission took place again. In this way alternating, for a few days, assisted by local depletion, by means of cups over the inflamed part, I have frequently succeeded in breaking up the very worst forms of Lung Fever. But as Tartar Emetic seemed to possess greater influence over the different forms of Pneumonitis, than Ipecac, I was naturally led to try its efficacy, combined with Quinine, and giving at the same a sufficiency of Morphine to prevent its action on the bowels. Accordingly I settled down on the following prescription, varied according to circumstances.

When called to a case of Pneumonia in its earlier stages, say on the second or third day after; if the excitement were high, pain severe, and great difficulty in breathing; dry hacking cough; pulse 80 to 95, and often 100, full, and tolerably hard, or incompressible; tongue dry, and coated with a yellowish or brown fur, red at the tip and edges, with regular exacerbations, I first took blood from the arm, if the age, sex, and constitution of the patient would admit; at least, I cupped him freely over the chest, or seat of pain, drawing more or less blood in that way, and gave him Calomel, 10 grs.: Rhubarb, 16 grs.; followed by oil in seven or eight hours, unless it oper-



ated sufficiently of itself. As soon as the purgative effect of this dose was over, and the proper intermission had arrived, I gave him Quinine, from 5 to 10 grs.; Tartar Emetic, from  $\frac{1}{2}$  to  $\frac{1}{4}$  grs.; Morphine,  $\frac{1}{2}$  to  $\frac{1}{4}$  grs.; adding or leaving out the latter, as the nature of the case required, only giving a sufficiency to keep him calm, and prevent the Tartar from running off by his bowels; and I repeated this quantity every three hours for a greater or less time, stopping them should I think too high excitement had come up, or continuing them if I found they were cooling the fever, easing the pain, loosening the cough, and exciting a proper quantity of good billious stools, as they not unfrequently did. If I was compelled to stop them the first time, and again resort to local, or even general blood-letting, as was sometimes, though not often, the case, I again resumed their use, as soon as the next intermission took place. I seldom had to desist a second time, unless I did so merely to give the patient some little rest from medicine. I treated some twelve cases with local depletion, mild aperients, and then commenced the use of the above named medicine, so soon as there was a remission after the operation of the aperient. I soon began to prefer this mode of treatment to all others; and had recourse also to the use of Mercury (Calomel or Blue Pill,) combined therewith. Out of the twelve cases I treated in this way, not one died, and but one went over five days, without having all traces of the fever to disappear. More than one half of the cases, so far as my experience extends, are broken up by the fifth day, and the patients not in any degree weakened, as they generally were under the old treatment. I was frequently foiled in my efforts to cut short these cases, by the administration of Quinine by itself, and at one time even thought Quinine a dangerous agent in Pneumonia. This arose from the fact, that I did not understand giving it properly in this disease. In this part of Illinois, and especially on the Embarrass River, from its mouth up twenty-five miles, and especially for fifteen or twenty

miles on either side, it is wonderfully sickly. Lying between this river and the Wabash, extending from the mouth, where it empties into the Wabash, for ten or twelve miles up the latter stream, and fifteen or twenty miles up the Embarras, is a low, sandy tract of land, having a rich soil, most of which is subject to frequent overflows, and on, or near which, a wonderful degree of Intermittent and Remittent Fevers prevails, from May till November, and a peculiar form of Pneumonia from February till May, and all of which diseases must be cured principally by Mercury, Tartar Emetic, and Quinine. In no section of Illinois, not even in the American Bottoms, does that peculiar form of fevers, termed Malarious, prevail to a greater extent, than in this part of the Wabash Valley, and especially on the Embarras River.

Most parts of our county, (Lawrence) are quite healthy; but that portion lying immediately on the Embarras River, is extremely unhealthy. Indeed, all Illinois is subject to a large share of malarious disease. Our Winter Fevers partake more or less of that peculiar form of disease, and as Quinine in the Autumnal Intermittent and Remittent Fevers, is '*the medicine*,' so is it '*the medicine*' in our Winter Fevers, attended though they may be, and kept up by local inflammation. I have seen cases that have resisted the ordinary means of cure for days, and the patients had given up all hope of recovery, with one lobe of his lungs perfectly consolidated, yielding a dull, flat sound on percussion, and the vesicular murmur entirely absent, either anteriorly or posteriorly; with great difficulty of breathing, a feeble, quick pulse, cadaverous countenance, suddenly snatched from the grave by the following treatment:

R Quinine, grs. ij; Tartar Emetic,  $\frac{1}{2}$ ; Cayenne Pepper,  $\frac{1}{2}$ ; Blue Mass, grs. 10, (and sometimes Calomel 5 to 8 grs. instead of the Mass,) and Sul. Morphine,  $\frac{1}{4}$  grs., combined and made into one dose, and the like quantity, only leaving out the Morphine every time but the third one, to be given every three



hours. Should the occasion demand it, I would also give an occasional dose of Syrup Squills, to enable the loose mucus to be freely thrown up. In addition to this treatment, I generally apply a large blister over the chest, and also give oil, or use injections, to keep up a sufficient action of the bowels; but am careful to guard against unnecessary purgation.— Under this mode of treatment, I have almost invariably seen them commence mending, and soon be up and about their business.

I have, like Dr. Stokes, always noticed Tartar Emetic exerts its most salutary effect on the human system, in the cure of inflammatory conditions of any organ, when it neither vomits nor purges. Combined with Quinine, it does not prostrate the nervous system as it does uncombined, while the Quinine is prevented from acting to such an extent as a stimulant, as when uncombined with Tartar: while its sedative and febrifuge properties are increased by the union. The Morphine also prevents the Tartar from running off by the bowels, and gives it a chance to exert its powerful properties on the system. The Mercury is a most valuable combination in the latter stages, and necessarily precedes the above in the earlier stages. Every practitioner in the Mississippi Valley, must have felt the dangerous position of being called to treat a bad case of Pneumonia, and finding his ordinary means fail, has resorted to Quinine, as directed by some of our best authorities, and found it fail also. But my word for it, in nine cases out of ten, where these failures are experienced, if resort was had to Quinine, Tartar Emetic, and Morphine, also Mercury, if the state of the secretions demanded it, combined in different proportions, according to circumstances, immediate relief would be the result, and by perseverance, a complete cure effected.

Many have been induced, from reading the works of our systematic writers of the day, to try the benefits of Quinine in Pneumonia, and other local inflammations combined with a

malignant form of fever, and have not met with that success they were induced to believe would be the result, and hence have abandoned it in perfect disgust. But if they will make the combination I have here laid down, as near as the circumstances of each individual case will permit, using as adjuvants, local depletion, and mild aperients, as often as required, they will be most happily disappointed.

As I remarked in the outset, it sometimes becomes necessary to bleed generally and freely, by opening a vein in the arm, and following that with a brisk cathartic and the use of cups to the part, frequently applied and then the above combination will exert its most salutary influence on the system. I seldom use Rhubarb in the way Dr. Howland has advised, nor the Soda, and hence cannot speak as to their beneficial qualities in such combination, though I have no doubt but that they often operate kindly. I use mucilaginous drinks from the commencement, in Pneumonia. I have seen, and indeed it is common with me, to have Pneumonia disappear in the course of from three to five days; whereas I used to think myself well off if I cured a case in from nine to fourteen days.—Patients treated in this way, get right up whenever the fever leaves them, and regain their strength very rapidly; while those that are treated in the old fashioned way, get out of bed slowly, regain their strength slowly, and are much more liable to relapse, than when treated by Quinine, &c.

Another grand reason why Tartar Emetic ought to be combined with Quinine, Morphine, &c., is because you can give the Quinine with the greatest safety and most beneficial results at the commencement of the attack, only waiting, as a general thing, to reduce the excitement a little, by general or local depletion; to open the bowels by means of a mild but brisk purgative, which will not take, usually, over five hours; when you commence giving the great anti-periodic and febrifuge medicine, combined with the most powerful sedative and

## TREATMENT OF PNEUMONIA, ETC.

anodyne agents; and when Calomel or Blue mass be given also, you have at once, and in one combination, the medicines that combine the most powerful curative properties; and which would, so combined, in this miasmatic region, come nearer being a cure-all, or Panacea, than any other article of medicine within the knowledge of man.

## Part 2.—Reviews and Notices of New Works.

### ARTICLE I.

#### *Parturition and the Principles and Practice of Obstetrics.*—

By W. TYLER SMITH, M.D., London. Lecturer on Obstetrics in the Hunterian School of Medicine. pp. 375. Duodecimo. Philadelphia. Lea & Blanchard. 1849.—  
(From the Publishers, and for sale by S. C. Griggs & Co., Chicago.)

This is a work devoted principally to the application of the doctrines of Reflex Physiological Action as taught by Marshall Hall, to Obstetrics. In this application, the author claims originality, which, if not true as regards the idea, is certainly so in reference to the extent to which these speculations have been carried.

The work is arranged in lectures, of which there are twenty-six with an appendix.

The style of the author, although occasionally obscure, is generally good, and free from the bombast that has blemished the writings of some on the same subject, and which is particularly objectionable in works of a scientific and practical character.

Our author introduces his work by drawing a comparison between British and Continental Obstetrical Practice; the result of which, according to his showing, is, that Protestant is decidedly preferable to Roman Catholic influence in controlling practice. This, he thinks, is proved by the difference in the choice between the life of the mother, and that of the child, when one or the other must be sacrificed.

Dr. Smith is decidedly British in his views, and thinks it very doubtful whether the introduction of the opinions and improvements of other countries into British Obstetrics, has not been of decided disadvantage. But we think his boast of a preference for craniotomy in England, if we refer to the statistics of these and forceps cases from that country and from France, by no means establishes the superiority of British humanity and civilization. And the want of success in England, in the Cæsarean operation, may as fairly be considered a cause of its dread as religious opinion—especially among those who have no religious feeling whatever. But again, it may be said that English want of success depends much on the dread of its performance, as delay will always diminish the chances of success.

Dr. Tyler Smith is decided in the expression of his opinions on most of the subjects of which he treats; and however we may differ with him on some points of importance in practice, and notwithstanding he may not have convinced us of the truth of his reflex doctrines in all respects, still we are highly pleased with many parts of the work. His arguments against the separation of the placenta in unavoidable hemorrhage, as recommended by Prof. Simpson, are forcible, and coincide with our own convictions of propriety. The chances for preserving the life of the mother would appear equally as good in the old practice of turning to deliver, while those of the child are beyond comparison better. In fact, the practice of separating the placenta offers scarcely any chance to the life of the child, and of course it would require positive proof, of not only its decided advantage to the mother, but of its necessity to her safety to justify the practice.

The author is especially severe on Midwives, or female practitioners of the Obstetric Art, who, according to his account, are fast going out of fashion in England. He thinks the "*sage femmes*" of France superior to the English Midwives.



but thinks the manner of their advertisement throws ridicule on this department of medicine in that country.

The following passage will give a specimen of the author's style, and shows "*la mode de Paris*" for announcing the pretensions of the female practitioner.

"Even in the most aristocratic quarters of Paris—the Rue and Faubourg St. Honoré, for instance—the '*sonnette de sage-femme*,' or the door-bell of the midwife, may be seen with a miniature picture of the smart midwife herself, in oil colors, over it, in the act of presenting a fine baby to all comers. Or there may be observed paintings of more pretension, giving the passer-by the penetralia of the lying-in room, and containing full length portraits of the accoucheuse and the everlasting baby, with an interesting view of the lady-accouchée in bed in the back-ground; the not over-delicate painting by Rubens, in the gallery of the Louvre, of the delivery of Marie de Medici, reduced to common-place—the *sage-femme* doing the work of the angels of that celebrated artist."

We had intended to give a somewhat extended analysis of the work in the present number of the Journal, but must defer this for want of time to give it the attention it demands.

E.

## ARTICLE II.

*Lectures on the Diseases of Infancy and Childhood.*—By CHAS. WEST, M.D., Fellow of the Royal College of Physicians. Page 452: octavo. Philadelphia: Lea & Blanchard. 1850. (From the Publishers, by S. C. Griggs & Co., Chicago.)

This work, which recently came out in the Medical News and Library, in numbers, is now before us entire, and is a highly valuable treatise.

Although we should be in favor of an International Copy Right Law by Congress, to prevent the appropriation of the labors of others to our own use without paying them any thing in return, and to give our own authors an opportunity to enter the field in competition ; still, while there is no such restriction, and books will be republished here without paying any thing for the Copy-Right, as we is the case with foreign works, we are glad that such good books as this are selected, for our publishers cannot be accused of furnishing an inferior article, if it does come cheap.

The operation of this system of republication upon our native talent for writing, both in book and periodical publication, is most destructive to our national medical literature. As it now is, the American author is not only under obligations to write for nothing, to compete with foreign productions that come on those terms, but he must produce a better work than can be found in Europe, or his work will receive no attention. In this, the advantages, it is true, are on our side, as works written here, might, *a priori*, be expected to suit the wants of the physician of this country on account of the peculiarities and modifying influences on diseases that are found in the climate, constitution and habits of the people, and the existence of new forms of disease in this country.--- But notwithstanding these differences, which we think all of our countrymen will asert to exist, there are many who will buy the foreign work, of the same comparative merit, in preference to the native producton.

Then let us have a Copy Right Law, that will foster a national medical literature in America.

E.



## ARTICLE III.

*Remarks on the Obstetrical Forceps, with a Description of an Instrument Employed.*—By JAMES P. WHITE, M.D., Prof. of Obs., etc., in the Med. Department of the University of Buffalo. (From the May No. of the Buffalo Med. Journal.) From the Author.

This is a small pamphlet of eight pages, with a cut, that has been on our table for some time ; and but for misplacement, would have received earlier attention.

After a brief review of the forceps in Europe, with an account of the forms of the instrument most in vogue, the author says of the instrument as used in this country—"Most of those which I have examined are bungling modifications of Dewees' improvement of Baudeloque's or of Seibolds."

The author thinks Dr. Hodge's "*Eclectic Forceps*" the best in use, but points out the defect, which we have found to be a serious one, which is the want of sufficient strength in the instrument to prevent it from giving so as to slip off of the head of the child.

The instrument which the author modestly says has been used by himself, is a beautiful one, and evinces the author's ingenuity, as it was not only used, but planned by him. We had the pleasure of examining Prof. White's forceps last spring, and if he has not carried the idea of extreme attenuation and lightness too far, we doubt not it will prove to be one of the best patterns yet devised. It is lighter than Prof. Hodge's, but the author says on account of the angle in Prof. Hodge's instrument, designed to adapt the blades to the head so as not to distend the maternal passage in advance of the presenting part too much, his will bear much greater force than they will without springing. Our opinion, however, is,

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that if Prof. Hodge's instrument were made of sufficient strength to prevent it from slipping off by the elasticity of the handles, the angle that adapts the blades closely to the head, so as to prevent the distension of the maternal passage in advance of the head, would be a valuable improvement, which our author has sacrificed to the idea of making the lightest, instrument.

We are at a loss to know why a sufficient amount of metal may not with propriety be put in the forceps, to render them strong enough, with any shape that might be most desirable, to answer the end for which they are designed.

There is an ingenious arrangement in one of the handles of Prof. White's forceps, by which the blunt hook is taken off, leaving the tenon to form a perforator, so that the instrument may serve entire as forceps—one blade as a vectis—the handle as a blunt hook, and also as a perforator. The handles are roughened to prevent the hand from slipping, which is certainly a good arrangement. E.

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#### ARTICLE IV.

*Contributions to Physiology.*—By BENNETT DOWLER, M.D.,  
Corresponding Member of the Academy of Natural Sciences of Philadelphia, etc. pp. 26. New-Orleans: 1849.  
(From the Author.)

This pamphlet is a separately covered copy of the article which originally appeared in our excellent exchange, the New Orleans Med. and Surg. Journal, detailing the author's experiments on the Alligator, as bearing upon the influence of the

cerebro-spinal axis and nervous system generally, in the functions of volition, sensation, muscular motion, and the reflex Physiological doctrines of Dr. Marshall Hall.

As an animal for vivisection the one selected would appear better, because endowed with a higher organization, than frogs and turtles, which have been extensively used; but as the author readily admits, it is a very uncertain mode of investigating the physiology of man, to draw our conclusions from observations on reptiles. There is a gradation in physical organization, from the zoophyte, up to man; the links of which are almost imperceptible, yet the extremes are so far removed from each other, that no one proposes to deduce from the foot of the scale, evidence in reference to the complex functions of beings at or near the top of it. And as the gradation in the anatomy and physiology of the nervous system passes from the simple and scarcely perceptible ganglionic nervous centres situated in different parts of the worm, its only evidence of brain; up to the fully developed and exquisitely organized cerebro-spinal axis in man, we would expect sources of fallacy, almost innumerable, in applying observations upon an animal scarcely above the middle of the scale, to the explanation of the functions of the one at the very summit of it.

Notwithstanding these serious impediments in the way of arriving at the truth in reference to the functions of the human system, by observations made upon the lower animals, it is clear that we are not likely to ever have any better mode of investigation, and from what has been said, it will be at once inferred, that the higher in the scale the animal, the more nearly will the results correspond with what would take place in man under such experiments.

The distinguished author of this essay has on former occasions maintained the doctrine that the function of an organ, as contraction of muscles, &c., was dependent upon the peculiar adaptation of the organ, and not upon the nerves that ex end to it their peculiar influence.—That muscular contrac-

tion was not the result of reflex nervous action; in proof of which he adduced the fact that muscles will contract when struck upon, after being severed from the nervous centres, &c.

In the present article, he has gone farther, and shows by his experiments that sensation, will, and volition, are, in the alligator, independent of the brain, as the animal "decollated," (that is, with his head cut off,) for hours removed intelligently, irritating bodies, with his feet and legs, when applied to the headless trunk: and when placed so that the feet could not reach the irritant, fire, the body, deprived of forward motion, would roll *from* it. This would seem to show the body endowed with intelligence or mind, and but for the approach of the animal towards the foot of the scale of organization, where the brain is distributed through various parts of the system, would go far to disprove the doctrine of centralization, that the mind in man has a sanctum sanctorum, or especial abiding place, as the brain, and to prove that it pervades the whole frame like the spiritual body, as taught by Baron Swedenborg. But it is known as we ascend the scale, centralization increases, and step by step the cerebro-spinal axis acquires additional importance, as manifested by its increased size and influence over the various functions. The lowest order of animal life is so distributed through the system that the divided body forms two distinct living individuals; and as we ascend higher, we find tenacity of life diminish, and the severed parts dying more and more speedily.

We quote one of the several experiments reported in the paper, authenticated by the presence of Dr. Cartwright, Prof. Forshey, and five other gentlemen, four of whom were physicians, made upon an alligator about three feet long:

\* \* \* "The decollation was not followed by a projecting stream of blood, as is usual; no ligature was applied to the great artery of the neck. The dull hatchet used in severing the spine of the neck, had probably bruised the artery

as in torison and gun-shot wounds. Hence the hemorrhage was not great, though considerable.

I carried the handle of the knife towards the eye, to ascertain whether it would wink; whereupon the ferocious, separated head, sprang up from the table with great force, at me, passing very near my breast, which received several drops of blood; it alighted upon the floor, from six to eight feet distant from its original position! It missed me, because I was standing at the side, and not in front of the head. Although, I have examined carefully, all the muscles of the head, I cannot find one that accounts for this feat of combative muscular motion. The angles of the mouth recede so much in this animal, that after decollation, including the medulla oblongata, the head seemed almost like two separate pieces,—the superior and the inferior maxillary bones, being joined chiefly by the great masseter muscles, for only a short distance. These great muscles, (the masseters,) which are curved, having their concavity anteriorly, are adapted only to vertical action, as in biting—the great muscles of the tongue act backward and upward against the palatine region:—whence then this quick, violent, forward motion, or rather, as in this case, diagonal leap of six or eight feet—for the head deviated to the left, where I was standing, evidently with the intention of biting me? The trunk, in this, as in all cases, possessed no power of forward motion. This curious fact with respect to decapitated animals, noticed by M. Magendie, and other vivisectioners, has been attributed to the *loss of the cerebellum*; but whether this loss of forward motion in the alligator, be owing to a division of the spine, and great muscles, or to the separation of the larger or smaller brain, or both, is not very evident, yet the fact which I have noticed respecting the forward motion of the separated head, is, perhaps, a circumstance favorable to this view. That a voluntary, spontaneous and powerful motion,—in fact a diagonal leap, should be performed by the separated head, must therefore appear astounding to one acquainted with the muscular organization. It is difficult to understand, how the cerebellum could thus act alone.

“For about two hours, the headless trunk of the last mentioned alligator, exhibited such phenomena as are usually attributed to the brain, namely, sensation. volition, and intelligent motion, as tested by the application of bits of ignited paper, wounds, and the like, whereupon, the usual indicants of pain were elicited with promptness and precision: it trem-

bled, receded, rolled over, curved, placed its limbs accurately to the exact spot, and removed the offending cause. In certain places this was exceedingly difficult, as on the spine between or near the shoulders, or hips. It always used the limb best adapted for the purpose. If the fire was too remote, as when applied to the tail, the whole body was thrown into the most favorable position, for the purpose of reaching and removing the same. If the fire was placed on the table, in a position to annoy, yet without touching, the animal, as if endowed with sight, reached, and always accurately, to the exact spot, and either extinguished the fire, or removed it. As upon former occasions, if the animal found that the fire was continued at the same spot, and that it could not remove it, which was sometimes the case, owing to continuous, or repeated applications, and carefully manœuvring, it curved the body—scratched violently, manœuvred skillfully, and then as a last resort, rolled quite over, laterally, always *from*, never *towards* the fire and operator.

"After these experiments had progressed for some time. Dr. Cartwright desired me to cut off the neck close to the shoulders. This was done, but the intelligent, sensational, and volitional motions continued as before."

We are equally at a loss with the author, to account for that leap of the head.

As the principal support of the reflex doctrine is drawn from experiments made upon animals equally low with the alligator, one of the experiments of our author militates strongly against it. In this experiment, the spinal cord was completely severed in the neck and midway between the shoulders and hips, after which the animal acted with perfect harmony between all its parts—"It saw, heard, felt, defended itself, showed anger, fear, and even friendly attention to its keeper, a black boy." The fore legs and hind legs acted mutually in removing a pricking body above the division in the cord.

The arguments of the author are forcible, and his familiarity with the subject apparent from his ready use of the opinions of others, which he handles without gloves. E.



## ARTICLE V.

*A Treatise on Diseases of the Bones.*—By EDWARD STANLEY, F.R.S.; President of the Royal College of Surgeons of England, and Surgeon to St. Bartholomew's Hospital. Philad. Lea & Blanchard. 1849. pp. 286. 8 vo. (For sale by Jos. Keen & Bro., Chicago.)

This book came to hand as we were about to close the Bibliographical department of this number of the Journal, and we have had time to make only a very cursory examination of its pages. With the exception of the work of Dr. Gross, it is the first treatise which we recollect to have seen devoted entirely to a consideration of Diseases of the Bones.

Judging from the distinguished position of the Author, and his ample facilities for observation in this class of diseases, we should expect to find this volume one of uncommon interest and merit. In the next number we shall endeavor to furnish our readers a more extended notice.

M.

### Part 3.—Selections:

#### ARTICLE I.

*Animalculæ in the Atmosphere of Cholera Patients.*—By R. D. MUSSEY, M.D., Professor of Surgery in the Medical College of Ohio, and first Surgeon of the Commercial Hospital at Cincinnati.

Several years ago, Count Moscati, of Milan, was commissioned by the government to analyse the atmosphere of the Milanese rice-grounds, and to ascertain the properties of the exhalations which arose from them. He found nothing peculiar during the day, but by suspending, through the night, glass globes filled with ice, at the height of three feet above the surface of the soil of a rice-field, he collected a fluid condensed upon the globes; which, on being kept a few days in phials, presented a flaky matter upon its surface. This appeared like mucus, and exhaled a foetid odor. The same experiment was made in the hospital at Milan, and a similar mucosity was condensed upon the refrigerated vessels. Mr. R. Herman, of Moscow, in the first visitation of cholera in Russia, "found the air surrounding the patients to contain a substance which, when deposited upon cool substances, resembled animal mucus. It did not react upon test-papers, and was precipitated by sugar of lead and tincture of galls, bearing a great analogy to the substance which Moscati separated from infected air." Dr. Adam Neale very naturally suggests, that this substance should be submitted to inspection through the microscope.

During the prevalence of cholera this season, in Cincinnati, I was too much occupied to make the investigation I had intended, should an opportunity offer, until near the close of the epidemic.

In the last days of August, I was enabled to make the following experiment: A six quart glass jar, filled with ice and set in a clean earthen basin, was placed near to the head of the bed of a cholera patient who had recently been brought

into the Commercial Hospital in collapse. He died in seven hours. The jar and basin were then transferred to the bedside of another cholera patient, and allowed to remain there eleven or twelve hours. Fluid to the amount of about three ounces was obtained by the condensation of vapor, a part of which, no doubt, must have emanated from the lungs of the patients. On the first of September, in a drop of this fluid, placed under the microscope, a multitude of animalcules were discovered moving in all directions. They were different in shape and size. The largest were somewhat oval shaped, blunt pointed at each end, the long and short diameters being nearly as three to two. The smaller ones were circular or globular; and many times less than the oval ones. The several specimens of the oval variety differ greatly as to size. I observed two or three very large; they looked plump and moved more sluggishly than the rest, as if they might be about to multiply. The long diameter of the largest appeared to be just about equal to four diameters of a corpuscle of human blood. The motions of both varieties were performed with great apparent facility, and some of them moved with surprising swiftness across the field of the microscope.

Since the foregoing observations were made, we have obtained, at different times, three additional specimens of fluid from vapor condensed by the side of three cholera patients. In one of these specimens, animalcules were observed. The patient had a mild form of the disease, and was rapidly convalescent at the time the experiment was made. The thin, pale discharges from the bowels, however, in this case, contained animalcules. In the other two specimens of condensed fluid, a plenty of these animals were found, as well as in the rice-water discharges. Both the oval and globular animalcules were observed in each of the specimens of condensed fluid, with the one exception just mentioned. In the rice-water discharges, the globular animals seemed to predominate, but in two specimens the oval variety was pretty abundant. In the last specimen, obtained four days ago, a long, slender animal is also found in the rice-water discharges. Viewed through a magnifier of two thousand linear diameters, he appears to be about *one-fourth* of an inch long—his real length being  $\frac{1}{8000}$  of an inch. Is it a vibrio? He moves deliberately with a lateral flexure of his body, like a serpent on the ground, not with the up and down motion alleged to belong to the supposed sea-serpent of the Atlantic ocean. My son, Dr.

Wm. H. Mussey, who has greatly aided in these investigations, is confident that he has found this serpent-shaped animalcule in our last specimen of fluid condensed from the atmosphere. He has seen it several times, on successive trials of the fluid. Many of the specimens of the globular rice-water animalcules appeared to be not more than *one-twentieth* of the diameter of a blood corpuscle, while some of the oval variety, as already suggested, were in their long diameter, equal to four blood corpuscles, making a difference of eighty diameters in the size of the two kinds. In the oval variety of the first specimen obtained, I observed one of the animalcules to make a number of rapid gyrations in a small circle, then to poise himself upon one end, with his long diameter exactly vertical, then, to whirl himself for some time with great velocity upon this vertical axis like a spin-top. What was the object of this remarkable flourish, I could not satisfy myself. It was the only instance of the kind which was witnessed.

These animals exhibit a considerable degree of tenacity of life. When collected upon the surface of the refrigerated vessel, they were compelled to endure the temperature of the freezing point of water; and they were afterwards very active at nearly eighty degrees Fahrenheit. Probably their range of temperature, compatible with life, is much greater than this. The atmospheric animalcules of the specimen obtained the last days of August, survived thirteen days in a phial loosely corked, and the rice-water animals of the second specimen procured early in September, were still alive in considerable numbers, fourteen days after.

A shred of the vastus externus muscle, taken from a cholera patient ten hours after death, and inspected through the microscope, after having been for a few moments moistened with distilled water, exhibited multitudes of globular animalcules. Animal as well as vegetable substances undergoing decomposition, are generally understood to swarm with animals which seem to take an important part in pulling down the organized fabric, and resolving its materials into their primitive elements; but we were not prepared to meet with them so early, even before there was the least smell of change. We tried the same experiment with a piece of muscle taken twelve hours after death, from a subject dead of erysipelas engrafted upon a broked down constitution, without being able to detect a single animalcule.

We have also failed in finding these animals in the water used by the patients at the hospital. This is the hydrant water, brought from the Ohio river in iron pipes and distributed through leaden tubes. Some days after the cholera had disappeared from the hospital, a quantity of the atmospheric vapor of the same ward was condensed by a refrigerator in the manner already described. In this fluid we could discover nothing like animalcules,

The foregoing exhibitions have not been limited exclusively to my son and myself; Professor L. M. Lawson has had opportunity of observing both the atmospheric and intestinal animals; so also has Mr. Foster, whose familiarity with the manipulations of the microscope was obligingly afforded us at the commencement of our researches. Whether the varieties of animals we have observed belong to one tribe in successive stages of development, or whether they differ permanently in form and function, we are not sufficiently acquainted with this department of science to determine.

It was a favorite opinion of Linnæus that contagious and most epidemic diseases depend for their propagation upon animalcular agency. To confirm or disprove this hypothesis will require far more investigation than the subject has, as yet, received. Some of the contagious diseases have been satisfactorily made out to occur in this way; but it would be unwarrantable to infer, from the few which are known, the many that are still unknown. The animals found to exist in the atmosphere, and in the bodies of cholera patients, may be essentially concerned in the propagation of this frightful epidemic, or they may have nothing whatever to do in this way. Should the foregoing experiments and observations, imperfect and limited as they are, lead others who have opportunity and leisure to pursue the subject until legitimate inferences, important to mankind, may be made, I shall be glad to have done even this little. If the animalcular theory of cholera should be confirmed by a better acquaintance with the habits of these myriads of microscopic existences we may hope then to explain the mysterious movements of this "black death," and to learn the preventive and the remedy.

In conclusion, I may add that, within the past few days, we have discovered, in the matter discharged from a cancerous lip, animalcules of a circular form, surrounded by a wide fringed or ciliated border; and my son has found, in the small-

pox pustule, animals of a different shape from any others we have observed, viz: somewhat oblong, rounded at the ends, and indented on one side like a bean. It very much resembles the kolpoda cucullus of Pritchard, but is many hundred times smaller.—*Western Lancet*.

October 19, 1849.

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## ARTICLE II.

*On the Use and Administration of Cod-Liver Oil in Pulmonary Consumption.*—By C. J. B. WILLIAMS, M.D., F.R.S., Prof. of Medicine in University College, London; Consulting Physician to the Hospital for Consumption, etc. (From the London Journal of Medicine.)

There is no department of medical knowledge, which seems to me to stand so much in need of improvement, as that which relates to the operation of medicines. Even with regard to those most commonly used, it is surprising what a diversity of opinion prevails among different practitioners; and, as a necessary consequence, there is almost equal variation in the modes and combinations in which each medicine is administered. Yet, it is pretty obvious, that as truth is essentially simple and constant, that there must be much of error in such diversity of opinion and practice, and the sooner the truth is elicited by a careful and rational examination of facts bearing upon each subject, the more safe and satisfactory will our practice become.

The remedial influence of the COD-LIVER OIL particularly deserves this kind of investigation; not only because its mode of operation is a subject of much difference of opinion, but because the effects ascribed to it by many practitioners are of a very palpable and positive kind; and because such effects have not hitherto been obtained from other remedial agents.—The object of the present communication is to record the chief results of my own experience in the use of this remedy, in tuberculous and analogous diseases of the lungs. These results will be arranged briefly under the following heads:



1. General results of the use of Cod-liver oil in Phthisis Pulmonalis.
2. On its mode of operation.
3. On its preparation and administration.

1. *General Results of the Use of Cod-Liver Oil in Pulmonary Consumption.*

I have prescribed the oil in above four hundred cases of tuberculous disease of the lungs in different stages, which have been under my care in private practice, during the last two years and a half. Of these, I have 234 cases recorded in my note-books, with the results of the treatment at various intervals; these constitute the chief materials of the present communication.

Out of this number, the oil disagreed, and was discontinued, in only nine instances. In nineteen, although taken, it appeared to do no good; whilst in the large proportion of 206 out of 234, its use was followed by marked and unequivocal improvement; this improvement varying in degree in different cases, from a temporary retardation of the progress of the disease, and a mitigation of distressing symptoms, up to a more or less complete restoration to apparent health.

The most numerous examples of decided and lasting improvement, amounting to nearly 100, occurred in patients in what is usually termed the second stage of the disease, in which tuberculous deposits begin to undergo the process of softening, the common physical signs being defective movement and breath-sound, with muco-crepitation and marked dulness below or above a clavicle, or above a scapula, and tubular breath and voice-sounds towards the root, or inner part of the apex of the same lung. Such patients generally have had cough for some months, latterly with muco-purulent or opaque yellowish or greenish expectoration, and have begun to lose flesh, color, and breath, in such a degree as to excite alarm, and induce them to seek further advice. With many, night-sweats had occasionally occurred; and hæmoptysis may have been present at a former period.

The effect of the Cod-liver oil in most of these cases was very remarkable. Even in a few days, the cough was mitigated, the expectoration diminished in quantity and opacity; the night-sweats ceased; the pulse became slower and of better volume; and the appetite, flesh, and strength were gradu-

ally improved. The first change manifest in the physical signs was generally a diminution and gradual cessation of the crepitus; the breath-sound becoming drier and clearer; but the dullness, and tubular character of the breath and voice-sounds were much more persistent, and rarely exhibited a marked decrease, until after several weeks' use of this remedy, in conjunction with regular counter-irritation. The tubular sounds, in fact, frequently became louder at the first removal of the crepitus, which in phthisis as well as in pneumonia, tends to mask the signs of consolidation. In several instances, however, in which I have had the opportunity of examining the patients under treatment, at several successive intervals of a month or six weeks, the gradual removal of the consolidations has been unequivocally proved, by the restoration of clearer vesicular breath and stroke-sounds to the affected spots. In several cases, in which disease has existed long, the restoration has never been perfect; even where the health has been completely re-established, and all common symptoms of disease have entirely disappeared, there have remained perceptible inequalities in the breath and stroke-sounds; generally, with prolonged expiratory sound, which has more or less of a tubular note towards the root of the lung of the same side. These signs, if unaccompanied by decided dullness on percussio, I have learnt by the experience of many years, not to consider as exceptional against recovery, for they appear to be dependent on the puckering of the texture, often with pleural adhesions and old deposits in the bronchial glands, so frequently found after death at the summits and near the roots of the lungs of persons who have not for many years exhibited symptoms of any pectoral disease.

As might be anticipated, a large number of the phthisic patients for whom I have been consulted, have been in the first stage of the disease, in which the tubercles or deposits are in the solid state. In these cases, also, I have largely used the Cod-liver oil, and, so far as I have ascertained them, with not less satisfactory results; but a large proportion of these patients I have been unable to add to the numbers mentioned above, from my having seen them only once, or not frequently enough to enable me to determine with accuracy the results of the treatment. Such patients do not commonly consider themselves sufficiently ill to be under constant medical treatment; and although the good effect of the oil is commonly manifest in the abatement of cough and feverish excitement, and in the

improvement of flesh and strength, yet the benefit is less speedy and obvious than in more advanced stages of the malady. The physical signs of improvement are precisely the same as those which take place tardily in the second stage after the removal of the humid rhonchi; and in truth, the treatment by the oil combined with counter-irritation, where successful, seems to bring back the lungs from the second stage, that of incipient softening, to the first stage, that of simple deposit, which is tardier in its changes of increase or diminution, and may remain long stationary without any obvious alteration. The remark is applicable to the chronic products of inflammation of the lung, which, as is known to the profession, I consider to approximate in nature to the higher class of tuberculous deposits.

The most striking instance of the beneficial operation of Cod-liver oil in phthisis, is to be found in cases in the third stage,—even those far advanced, where consumption has not only excavated the lungs, but is rapidly wasting the whole body, with copious purulent expectoration, hectic, night-sweats, colliquative diarrhoea, and other elements of that destructive process by which, in a few weeks, the finest and fairest of the human family may be sunk to the grave.

The whole number of cases in the third stage of phthisis, (that is, with one or more cavities, as indicated by physical signs) which have been manifestly improved under treatment with Cod-liver oil, amounts to sixty-two, up to the end of August. In thirty-four of these, I know that the improvement has continued up to a recent period, when I saw the patients, or had reports. Eleven cases, which exhibited decided improvement for a time have since again declined or terminated in death. Of the remaining seventeen I have had no recent report, and I do not know whether the amelioration has been permanent or not.

The results above stated give to Cod-liver oil, even as a tardative or palliative in phthisis, a rank far above any agent hitherto recommended, whether medicinal or regiminal. I have made extensive trials of several other medicines of reputed utility in the disease, and on a future occasion may lay before the profession the results of my experience, which prove some of these agents to be by no means inoperative or useless; and I still consider them to be often salutary aids in the treatment of this formidable malady, but their utility and harmlessness fall so far short of those of the Cod-liver oil, that

I regard them now chiefly as subsidiary means, and the more likely to be useful, in proportion as they facilitate the exhibition or continuance of this superior agent.

If the experience of the profession at large should accord with my own, and that those of who have preceded me in recommending the Cod-liver oil, our prognosis with regard to phthisis must undergo some modification. To what extent this modification may reach, cannot be determined, until such cases as those which I have recorded have been tested by years of time, but even now, when we repeatedly find forms and degrees of disease, that former experience had taught us to be utterly hopeless and speedily fatal, retarded, arrested, nay sometimes even removed and almost obliterated by various processes of restored health, we must pause ere we, in future, pass the terrible sentence of "no hope" on the consumptive invalid.

## 2. *Mode of Operation of Cod-Liver Oil.*

It seems scarcely necessary to discuss the question, whether oil owes its efficacy to the iodine which it contains. The amount of this element is so minute as hardly to admit of quantitative measurement; and to ascribe virtue to such infinitesimal fractions, when ordinary doses have no corresponding activity, is to adopt the fanciful and mischievous speculations of the homœopathists, which cannot be too strongly deprecated by the scientific and conscientious practitioner. Several of the patients whose cases are cited above, and many more of whom I have records, had taken iodine in various combinations before taking the oil, but without any effects approaching to those which ensued on the change of treatment. I am by no means incredulous of the salutary operation of iodine in some forms of tuberculous and scrofulous disease; indeed, until I used the pure oil, I considered it to be the most useful remedy; but in the last two years, the oil has so far surpassed it and every other medicine in beneficial operation, that I am convinced that it acts by a virtue peculiar to itself.

The Cod-liver oil is a highly nutrient material; and it is commonly admitted by all practitioners who have used it, that it possesses, in a pre-eminent degree, the property of fattening those who take it for any length of time. But its

nourishing influence extends beyond the mere deposition of fat in the adipose tissue. The muscular strength and activity are sensibly and sometimes rapidly increased under its use; whilst the improved color of the cheek and lips implies a filling of the vessels with more and better blood. Researches are wanted, to elucidate this subject more clearly; but the analysis of the blood in one case of phthisis which had been under treatment by the oil, showed a most remarkable increase of the animal principles of the blood, especially the albumen, which amounted to thirteen per cent., being nearly double its usual amount, whilst the fat was not materially augmented; and the fibrin, which is generally high in phthisis, was reduced below the normal proportion. If these results should be confirmed by further observation, there will be no difficulty in understanding that the Cod-liver oil should prove a nutrient to all the textures; although it may yet be a question, whether it does so by direct conversion into albumen or fibrin, or by preventing the waste of the albuminous principle by protecting it from the action of the oxygen absorbed in respiration.

But there is much reason to believe that the oil itself proves serviceable in supplying the fat molecules which appear to be essential to healthy nutrition, as forming the nucleoli of the primary cells or rudiments of tissues. The important part which fat thus performs in the process of nutrition, was first pointed out by Ascherson of Berlin; and that fat forms the central molecules of the elementary granules and cyto blasts of textures, is generally admitted, although few agree with Ascherson in his opinion that the fat forms the cells by its power of coagulating albumen around it. It seems to have been the opinion of Dr. Ascherson and of Dr. Hughes Bennett, who cites it, that in scrofulous diseases there is a want of this fat, and that the albumen derived from the food in digestion is liable to be precipitated in an unorganizable condition (as tubercle, etc.) for the lack of it. But it is now well ascertained that scrofulous and tuberculous deposits, so far from being deficient in fatty particles, contain them in greater quantity than exists in the blood, or in its plasma in a healthy state. The explanation which I have given of the chief salutary action of the cod-liver oil, is not that it supplies fat where it is wanting, but that it supplies fat of a better kind, more fluid, more divisible, less prone to change, and more capable

of being absorbed into, and of pervading, the structures of the body: thus affording a fine "molecular base" in the chyle, and therein, a material for a better plasma; and being conveyed into the blood distributed through capillaries and around deposits (in such quantity as to soften and dissolve the crystalline and irregularly concreted fat scattered through them,) it renders them more amenable to the process of reparation and absorption. Hence its beneficial operation is more marked in those stages of tuberculous disease in which the deposits abound in fat: that is, at the period of maturation and softening; although from the extent of mischief already done both to the part and to the system, the benefit may not be so lasting as in the early stages of the disease.

One of the most remarkable effects of the cod-liver oil, in some cases of the second and third stage of phthisis, and in other forms of scrofulous disease with extensive suppuration, is the speedy removal of the sweats and other symptoms of hectic fever. This can hardly be ascribed to its direct nutrient powers; but I think that it is due to its influence in diminishing the unhealthy suppuration which is excited around the softening and excavated tubercles. If my views of the chemical nature of suppuration,—that it consists of a further oxydation of the exudation corpuscle,—be correct, then it is quite intelligible that the presence of so highly combustible a material as oil must check this process of oxydation, and thus prevent the degeneration of the corpuscles into the aplastic state of pus globules. In fact, if it should prove to be correct, according to the analysis above quoted from Simon, that cod-liver oil removes the excess of fibrin in the blood of phthical patients,—this also equally accords with my notion, founded on the inferences of Mulder and others, that the formation of fibrine is due to a process of oxydation of the albumen (forming a deutoxide of protein, according to Mulder;) and that, by preventing this, the oil removes that tendency to cacoplastic inflammatory deposits which largely contribute to increase the consolidation of the lungs and other organs in phthical subjects.

In making these surmises, I would not be supposed to adopt the idea of Liebig, that pulmonary consumption is the result of an excess of oxygen in the blood at large, consuming its materials, and those of the textures. Many of the symptoms, as well as the organic lesions of the disease, show that there is a great deficiency in the process of respiration by which



oxygen is supplied to the blood; and some of the most rapidly fatal cases, exhibiting speedy emaciation, are, throughout their course, in a condition bordering on asphyxia. Here is obviously a great want of oxygen in the blood,—nay, I believe the excess of fat in the liver, and in the tuberculous deposits, in these instances, to be caused by this very scanty supply of oxygen to the system. But although it is deficient in the system, enough oxygen comes into contact with the exudations from cavities in the lungs, and from the diseased bronchi in their vicinity, to effect the formation of much unhealthy pus; and it is the formation and reabsorption of this that seems to excite the hectic of phthisis, as well as to keep up much harassing local irritation. Now, I believe it to be by diminishing these exudations, and checking their further oxydation into pus, that cod-liver oil acts so promptly in reducing the hectic sweats and purulent expectoration of phthisis, which accelerate and aggravate its destructive progress.

The limits of this paper will allow me to notice but briefly one more point in regard to the action of cod-liver oil. Unlike other oils or fats, it rarely disorders the stomach or bowels, or disturbs the functions of the liver. If taken in any quantity, vegetable oils commonly purge, animal oils turn rancid in the stomach, causing heartburn, bilious attacks, and even jaundice. On the contrary, cod-liver oil generally improves all the chylipoietic functions, and distinctly promotes the action of the liver; so that the appetite and power of digestion are restored, and patients are enabled to take an amount and variety of food beyond what they were accustomed to, even in health. I cannot help thinking, that this peptic influence of the oil is due to its containing some biliary principle, which both favors its divisibility in the process of digestion, and promotes the natural secretions of the liver. The flow of bile, as indicated by the color of the feces, is generally free and uniform during its exhibition; and I must not omit to notice another fact, which I believe to be connected with increased activity of the liver. I have in numerous instances remarked that the bulk of the liver (as determined by percussion) becomes augmented during its use; yet without tenderness or any other sign of disorder. In fact, this seems to be a kind of useful hypertrophy, induced by the oil augmenting the bulk and quantity of the hepatic cells, and supplying at once a material the more fitted for this secretion, because it has already within it some elements of biliary matter which served

a similar purpose in the liver of the fish, and this at a lower temperature, and less favorable to the activity of the process. The observation of this influence of cod-liver oil has led me to use it in several cases of functional and structural disease of the liver, marked by defective or depraved secretion, and in some instances with most satisfactory results, especially in one of habitual formation of gall-stones, which had resisted all kinds of treatment, and was rapidly destroying the health: the use of the oil has entirely stopped the attacks, and has restored the patient to good health.

It appears probable, therefore, that although other oils might be equally influential in promoting nutrition, and in preventing and removing the cacoplastic and aplastic exudations of scrofulous subjects, the oil from the cod's liver, and perhaps those from the livers of other fish, have the advantage in point of digestibility, and in promoting the action of the digestive and biliary organs.

### *3. Preparation and Administration of Cod-Liver Oil.*

It may seem somewhat strange that this remedy, which has been long employed and valued on the continent, and in some limited localities in this country, and of late years has been strongly urged on the attention of practitioners, both at home and abroad should have been so slow in being received into general use. If the experience of other practitioners accords with my own on this point, I would give as the reason of this tardy introduction, the disgusting smell and taste of the oil as it has been commonly prepared, and an impression generally prevalent that the efficacy of the remedy is connected with these offensive properties. This notion was favored by Dr. Hughes Bennett, in his monograph published in 1841. At that time I made several trials of the oils, selecting the clearer specimens of the brown oil, as recommended; but I found that so few patients could take it at all, and fewer still were able to persevere with it, that the inference seemed to be, that however German and Dutch stomachs might bear it, English ones could not, at least among the upper classes. It was not until I had witnessed some striking examples of benefit ensuing from the use of the pure oil, prepared according to Mr. Donovan's method, that I began again to make trial of it, and to reflect further on its mode of operation when freed from

all impurities. The value of the oil will be much increased by the statement that in all instances I have prescribed it as *free from taste and smell as could be procured*; and so little difficulty has been experienced in its administration, that the proportion of cases in which it has decidedly disagreed has not amounted to four per cent.

The inoffensiveness of the oil implies the use of no process by which it can be deprived of its proper qualities. All that is required is, to obtain it *pure and fresh*, as it existed in the hepatic cells of the healthy fish when alive, without contamination by any process of putrefaction, roasting, boiling, or the like. On the contrary, the disgusting smell and taste, and dark color of the impure oil, proceed from the putrefaction and heat to which the livers are subjected, for the purpose of obtaining from them the utmost quantity of oil; hence it becomes highly rancid, and holds in solution or suspension various putrid and coloring matters derived from the corrupting cell and tissues of the liver.

It is not my intention to describe the details of the process by which the oil may be obtained in the greatest purity; but I may mention the following particulars, to which it is necessary to attend, in order to obtain a good product. The livers should be used as soon as possible after the death of the fish, every hour deteriorating the quality of the oil. The pale, plump livers should be preferred; those which are flabby and dark in color should be rejected as unhealthy. The livers, after being quickly pounded into a pulp, should be mixed with water of the temperature of about  $120^{\circ}$ , then filtered; and, after standing long enough, the oil is to be decanted from the filtered liquor, cooled to the temperature of  $50^{\circ}$ , and again filtered. The whole process is to be accomplished with as little delay as possible, and in closed vessels, to prevent the air from giving to the oil the slightest degree of rancidity. For the same reason the vessels, in which the oil is preserved, should be full, well corked, and kept in a cool place. I recommend the second filtration after cooling, to remove the more solid part of the oil, the stearin and margarin, which not only further clears the oil by its separation, but by leaving a preponderance of elain, gives to it more of that perfectly liquid and penetrative quality which promotes absorption and diffusion through the fluids and tissues of the body. My usual mode of administering cod-liver oil, is in doses of a tea-spoon-

ful, gradually increased, (if the stomach bear it) to a table-spoonful, floating on some pleasant-flavored liquid, such as diluted orange wine, or the Infus. Aurantii Comp., with a little Tinct. and Syr. Aurantii. The vehicle should be suited to the taste and stomach of the patient; and much of our success in exhibiting the medicine will depend on our being able to keep the palate and stomach at peace with the oil. In numerous instances I have found that the addition of a little diluted nitric acid to the vehicle will make it more grateful to the palate, as well as serviceable to the stomach; and we may often combine with it other medicines which are not disagreeable, and thus fulfil the indications of palliating symptoms by their means. The fittest time for taking the oil, is from one to two hours after the three first meals of the day.—At this time the chyme is beginning to pass from the stomach into the duodenum; and it would appear that the oil passes quickly with it, for given at this time it causes none of those unpleasant eructations which are apt to occur when it is taken either before or with food. There is nothing in the oil for the stomach to digest; and the less it is brought into contact with it, and the sooner it passes out of it, the better. When it mixes with bile and pancreatic juice in the duodenum, its division and absorption begin and proceed, as in the case of all fatty matters. Herein, too, we see a reason why the oil does not agree so well either with the palate or stomach, when mixed in an emulsion, or combined with liquor potassæ, as recommended by some practitioners.

In conclusion, I repeat, that further observations, and longer time, are requisite to determine with accuracy the extent to which this agent can control or remove tuberculous disease of the lung; but I would state it as the result of extensive experience, confirmed by a rational consideration of its mode of action, that the *pure fresh Oil from the Liver of the Cod, is more beneficial in the treatment of Pulmonary Consumption than any agent, medicinal, dietetic, or regiminal, that has yet been employed.*

## ARTICLE III.

*Cholera.—Report on the Nature and Import of certain Microscopic Bodies found in the Intestinal Discharges of Cholera.—*  
Presented to the Cholera Committee of the Royal College of Physicians of London, by their Sub-Committee, on Oct. 17th, 1849.

We propose, in this Report, to lay before the Committee the result of some experimental inquiries on a subject which, within the last few weeks, has engaged much of the attention of the profession. We allude to the discovery, by Mr. Brittan and Mr. Swayne, of Bristol, of peculiar bodies in the "rice-water" dejections of cholera patients; and to the statement that similar bodies have been found by Mr. Brittan in the atmosphere, and, subsequently, by Dr. W. Budd, in the drinking-water of infected localities.

These observations, on account of their important bearing, if true, on the pathology of cholera, seemed to us to demand a searching examination. We have, accordingly, given much time and attention to the subject. Having, in the first place, satisfied ourselves of the distinctive characters of the bodies found in the rice-water dejections, we next sought to verify the observations of Mr. Brittan and Dr. Budd with reference to their presence in the air and drinking-water of places infected with cholera. It was necessary that this part of the inquiry should not be delayed, for the epidemic has already reached its turning point, and it would before long, have been difficult to obtain favorable opportunities for experiments of a satisfactory character.

Our inquiries were afterwards directed to the nature and properties of the newly discovered corpuscles, and to the question of their occurrence in other diseases. In this investigation, we soon perceived that objects totally different had been regarded as identical; but we had arrived at no positive conclusion respecting those which seemed most characteristic of the cholera evacuations, when we received two important communications on the subject from Mr. Marshal and Dr.

Jenner. The letters of these gentlemen are appended to this report; but the results obtained by them are imbodied in it.

Our observation on the air and drinking-water of infected localities, twenty-four in number, gave uniformly negative results. With regard to the value of our experiments, taken separately, it will, we think, appear that many are liable to no objection. Some of those which relate to the drinking-water of infected places, are certainly wanting in the conditions which would make them convincing. But when it is considered that Dr. Budd believes he has detected the objects sought for "in great numbers," in such large bodies of water as the Float, at Bristol, and the Surrey Canal, and that he represents them as being deposited in the sediment of the water, we shall not be thought unreasonable in having expected that they might be discovered in the cisterns of houses and public institutions in which cholera had prevailed severely, although it had ceased for some days or weeks.

Nevertheless, a much larger amount of evidence would have been required to disprove the statements to which our observations refer, had those statements been unassailable from other points. But the facts to be detailed in the subsequent part of this report, will show that the bodies found in rice-water dejections have no peculiar relation to cholera; and, that if they should occasionally be present in the atmosphere, or impure water, this will not happen exclusively, or even especially, in districts infected with the epidemic.

We shall now submit the particulars of all the observations to the Committee, describing, first, those on the air.

[Here follow accounts of the collection of condensed moisture from the atmosphere of apartments where patients had died, or were lying ill with the disease; and of water used by cholera patients in infected localities. These collections were made in twenty-four different neighborhoods where the disease was prevalent.---The following were the results of careful microscopic observation.]

*Observations on Water Condensed from the Atmosphere of  
Infected Localities.*

Two methods were employed for condensing the aqueous vapor. One was, to suspend in the air to be examined a glass funnel, nearly filled with a freezing mixture, its lower



opening having previously been closed with a cork and covered with sealing-wax. The moisture condensed on the out side of the funnel, trickled into a small phial placed beneath.— The second method was, to force air slowly, by means of bellows, through a bent glass tube immersed in ice and salt; when the moisture was deposited on the interior of the tube, and collected in a bulb at its lower part. In either way from half a drachm to a drachm of water was readily obtained.

\* \* \* \* \*

The water condensed from the air in the several localities, and under the circumstances we have described, was in each case, examined by us more than once. But the search for "annular" bodies, such as those found in the cholera dejections, failed, as we have already intimated. Neither cells, nor rings, nor any thing bearing any resemblance to them could, in most cases, be discovered. We saw merely portions of gelatiniform matter containing bright points; sometimes finely granular, brownish masses, perhaps derived from smoke—and occasionally colorless, transparent particles, of a crystalline appearance, which may have been portions of siliceous dust. After the water had been kept some time, chains of delicate oval vesicles, like those of the torula of yeast, but much smaller, appeared in it. These were absent at first, and could not be mistaken for the cholera discs. Equally unlike those discs were the three or four separate oval cells, which, in two instances, were seen in the water when first examined. They had a clear, single outline, and were not flattened.

*Microscopic Observations on the Drinking-Water of Infected Places.*

\* \* \* \* \* The uniform result of these experiments, (on the water of infected places,) as of the first series, was negative. No bodies were found which could be regarded as identical with the more characteristic of those found, by Messrs. Brittan and Swayne, in the rice-water dejections of cholera. The objects met with were far more numerous than those seen in the moisture condensed from the atmosphere. The sediment, when viewed with the one-eighth-inch object glass of Ross, or one-sixteenth-inch object-glass of Powell and Lealand, presented, besides amorphous matter, an almost endless variety of organic forms, both animal and vegetable. Amongst these

were many round or oval cells, of various dimensions, and some separate rings of minute size, colorless, and pellucid.—The cells had generally very delicate walls and a clear cavity, were never flattened, and often contained a multitude of distinct granules, which, in some instances, presented the molecular motion. Like the rings, these were obviously different in their nature, from the thick-edged discs, which the descriptions and drawings of Messrs. Brittan and Swayne, and Dr. Budd had led us to regard as the characteristic corpuscles of the cholera evacuations.

The negative results of our search in the atmosphere of infected places, for objects identical with those referred to, are confirmed by some observations communicated to us by Mr. Marshall. While cholera was prevalent in St. Giles', he examined the dirt washed from the broken glass of windows, and from cobwebs taken from houses in that district, in which deaths had occurred from four to ten days previously. With one-twelfth-inch or one-eighth-inch object-glass, he found a vast number of objects, such as particles of silex and soot, hairs, wings, and legs of insects, round and oblong cells of a brownish color, very dark spherical granular masses, probably of a confervoid nature, and fragments of vegetable tissue, amongst which were pieces of spiral tubes, and entire rings, apparently of woody tissue, of an oval, polygonal, or circular form. But he detected no discs with double outline. A microscopic examination of the objects collected on a moist surface from the atmosphere of sewers, gave Mr. Marshall a similar negative result with regard to those discoid bodies; although he found (besides fine particles of silex and other dust) brown, oval, and round cells, single and in couplets, minute colorless vesicles, either single, double, or in triplets, a single large oval cell, and numerous opaque, granular, confervoid bodies, of a brownish or blackish green color.

*Microscopic Observations on the Bodies found in the Cholera  
Dejections.*

We next proceed to show how various are the bodies which have been confounded together under the terms annular bodies (Mr. Brittan,) cholera cells (Mr. Swayne,) and cholera fungi (Dr. Budd.)

On examining the drawings given by the three gentlemen

who have called attention to the subject, four principal forms, which can hardly belong to the same objects, may readily be distinguished.

1. *Rings*, which enclose a free area, and which often are broken. These are usually of minute size, according to Mr. Brittan and Mr. Swayne, but occasionally large according to Dr. Budd.

2. *Globular, or oval cells* chiefly of the middle size, which have a thick wall, with numerous small eminences on its surface and contain a granular mass, in some instances, separated by a clear space from the wall of the cells. These are distinctly figured only by Mr. Swayne, but are regarded by him as perfectly developed cholera cells.

3. Bodies having apparently the form of *discs, with thick rounded edges*, and centres of indistinct structure. These vary extremely in size, including some of nearly the smallest, as well as many of the largest, of the objects represented by the three different observers. They predominate in all the representations given of the corpuscles of the rice-water dejections, and must be taken as the type of the bodies discovered by Messrs. Brittan and Swayne.

4. *Large broken cells*, having apparently homogeneous membranous walls, and containing small, well-defined, oval bodies; figured by Dr. Budd as cholera fungi undergoing decay, but differing in character from all the other objects represented.

A mere inspection of these different figures would suggest strong doubts as to their representing different appearances of really identical bodies in different states or stages of development or decay. The more particular description we have now to give of each kind of body, will demonstrate that they are of various and distinct nature.

1. The rings, when closely examined, are seen to be of different kinds; some perfectly continuous in their entire circle; others formed by a curled fibre; some round, some oval, others lozenge shaped.

Some of these have been traced to their true source by Mr. Marshall, who has found that exactly similar objects may be prepared by the artificial digestion of the vegetables used as

food—such as cabbage, potatoes, and onions, the withered style of wheat grain, and portions of cane in sugar; the spiral and annular tissues of which break down into rings of different sizes or coils resembling rings.

Intermediate between these and the third class of bodies are minute, oval or round, colorless corpuscles, which have an annular appearance; but, on close inspection, are seen to have their area filled up with a transparent substance, presenting sometimes perforations. In some specimens of the rice-water fluid, oval bodies, in part having their middle filled up as here described, and, in part, mere rings, exist in extraordinary abundance. The rings of these bodies have been observed, by Mr. Busk and Dr. Griffith, to be divided by cross-lines, into segments, which Mr. Busk thinks are bead-shaped—an appearance which had occasionally been noticed by ourselves as well as by Mr. Marshall. They are calcareous structures, originally derived from chalk, in which they abound; and they have been introduced into the contents of the intestines with the medicines (chalk mixture, aromatic confection, &c.) which the patients have taken.\* These minute bodies from the chalk are, of course, not found in all cases; and we think it not unlikely that, in their absence, the separate nuclei of animal and vegetable structures, as well as the vegetable rings above described, may sometimes have been mistaken for fungi.

2. The globular bodies have been clearly identified by Mr. Marshall with spores of different kinds of uredo, the rust, smut, and bunt of grain; some species of which may be found, not only about the withered style on grains of wheat, but also in almost every specimen of corn and bread.

Mr. Busk has made the same observation, and identifies them with uredo segetum, or bunt.

\*It is right to state how we arrived at the knowledge of these facts. Dr. Griffith had pointed out to us that the bodies in question are heavy, polarize light, and are soluble in dilute nitric acid. He suspected that they were oxalate or Phosphate of lime. Mr. Marshall subsequently showed us that acetic acid also dissolves them readily, and that sulphuric acid acts on them, producing needles of sulphate of lime. Having ourselves found the same bodies in the evacuations of two patients suffering from typhoid fever, we were examining them in company with Dr. Griffith and Mr. Marshall, when the demonstration of their calcareous nature reminded us of the fact, that these patients had been taking medicine containing chalk, and at the same, brought to our recollection the remark made to one of us by Mr. Topping, that Mr. Brittan's "annular bodies" were to be found in chalk-mixture. Accordingly, we examined a portion of medicine containing aromatic confection, and, afterwards, a piece of common chalk, and in both, found the bodies described above, though not the larger discs which are also found in the rice-water fluid. Ehrenberg figures these calcareous bodies, and describes them as being "crystalloids." *Abh. d. Akad. d. Wiss. z. Berl.* 1838, p. 68.

3. Discs, with thick, elevated, and somewhat irregularly curved margins; the central area flattened, and obscurely granular. They have generally a yellowish, or pale brown tint, which varies in depth with the color of the fluid containing them. These are the most peculiar of the bodies found in cholera, and differ from the rest in being more or less soluble in ether. Mr. Marshall, who first informed us of this fact, found that the smaller discs undergo nearly complete solution, leaving a cavity in the dried mucus, whilst the larger ones leave a fine granular film. They are apt to break across, and the thick margin to curl inwards. They are evidently not cells, nor have they any organized structure which could give them any claim to be regarded as living organisms. On the other hand, their solubility in ether shows that they consist, in great part, of some substance of the class to which the fats, resins, and saponaceous matters belong. This observation led Mr. Marshall to examine different fatty substances, and at length to find that curled concretions, not unlike the discs found in cholera, could be obtained by compressing a piece of rich cheese (with or without the addition of ether) between two plates of glass. We are not yet able to account for the origin of these peculiar discs. Mr. Busk regards the smaller ones as altered starch grains. It is, at all events, certain that they are not fungi; and, as we shall afterwards see, that they are not peculiar to cholera.

Mr. Busk thinks that the larger discs are the altered contents of bran-cells. Mr. Marshall, too, has, independently, made the observation, that certain yellowish bodies, sometimes seen, which have a thinner and narrower border than the fatty discs, and are merely rendered pellucid by ether, may, perhaps, be derived from bran. The granular masses contained in bran-cells have, however, when undigested, no distinct border.

4. Under the fourth class of bodies, we refer to those represented by Dr. Budd as the cholera fungi, undergoing decay and disintegration. They are evidently of a different nature from those figured by him as characteristic of the fresh cholera dejections. The mode of disintegration of the two classes of bodies is quite distinct: the so-called cholera bodies, after resisting the action of water for some time, break up into irregular granular masses; whilst the decomposing bodies depicted by Dr. Budd, seem to be, in part, homogeneous,

membranous cells dehiscing; and are, perhaps, starch cells. The rings are most probably, parts of disintegrated vegetable tissue.

It is shown by Mr. Marshall, and had before been noticed by Boehm, and others, that cells like fungi, or their spores, are occasionally found in the excretions in cholera.— These, however, have a more delicate structure than any of the bodies described as characteristic of cholera, and are totally different from them. It is well known that various vegetable forms are apt to become developed in organic fluids generally.

From a review of the foregoing facts, it is obvious that various bodies found in cholera dejections have been confounded and described as identical. It is also shown, that many are traceable to an extraneous source, and that even the discs placed in our third division, are not fungi. The statement, that the bodies found in the cholera dejections present an endogenous multiplication, has, in all probability, arisen from confounding them with the uredo, or from mistaking the appearances produced by the small bodies seen through, or upon, the larger ones, or entangled in their substance.

We are unable to identify the rings obtained from the air, and figured by Mr. Brittan, with any of the bodies included him under the term "annular bodies." Our own experiments have satisfied us that these bodies do not commonly exist in the atmosphere of infected places, but the observations of Mr. Marshall, on the dirt collected from windows and cobwebs, show the great variety of matters which must be wafted about in the air, in the form of dust, and which might, in different instances, be caught with the condensed moisture.

The bodies represented by Dr. Budd, as being found in impure drinking water, have the form of discs with thick edges. We have ourselves never seen such bodies in water. But, if it should be established that the contents of bran-cells sometimes assume that form, the occasional presence, in water, of bodies capable of being confounded with the discs derived from the discharges of cholera, will not appear remarkable.

Had the bodies described by Messrs. Brittan and Swayne been proved proved by the foregoing investigations, to be of fungoid nature, yet the facts we have now to add would have shown that they have no necessary connection with cholera. In the first place, they seem not to be constantly present in the discharges. It is, indeed, remarkable that, in those de-



jections which, from the absence of color, have usually been regarded as the characteristic of the disease, they are frequently absent. We have failed to find them in several instances. In one, a portion of every evacuation was set apart, and examined several times by each of us, and yet in no portion could we detect them.

A still more important fact, which, from the explanations already given might be anticipated, is that all the more remarkable of the bodies which have been thought peculiar to cholera, exist in the intestinal evacuations of persons affected with other diseases. Dr. Jenner first demonstrated to us their presence, in great abundance, in the dejections of a patient affected with typhoid fever. We have since verified his observations in five other cases of this disease. We have also satisfied ourselves of the existence of some of the forms in dejections apparently healthy, from two patients in Guy's Hospital; one suffering from bronchitis, the other from early cirrhosis of the liver; and Mr. Marshall has detected small annular bodies, "in the mucus covering the healthy excrement" of several herbivorous animals. It is obvious that bodies derived from such various sources will not commonly be found all present together. This, indeed, is not the case in cholera. The minute bodies, especially, which belong to chalk will, of course, very rarely be met with, except that substance has been taken as medicine.

We shall now briefly re-state the principal results we have arrived at, and submit the conclusion which seems to us justified by them.

1. Bodies presenting the characteristic forms of the so-called cholera fungi are not to be detected in the air, and as far as our experiments have gone, not in the drinking water of infected places.
2. It is established that, under the terms "annular bodies," "cholera cells," or "cholera fungi," there have been confounded many objects of various, and totally distinct natures.
3. A large number of these have been traced to substances taken as food or medicine.
4. The origin of others is still doubtful, but these are clearly not fungi.

5. All the more remarkable forms are to be detected in the intestinal evacuations of persons laboring under diseases totally different in their nature from cholera.

Lastly, we draw from these premises the general conclusion, that the bodies found and described by Messrs. Brittan and Swayne are not the cause of cholera, and have no exclusive connection with that disease;—in other words, that the whole theory of the disease which has recently been propounded, is erroneous, as far as it is based on the existence of the bodies in question. [Signed]

WILLIAM Baly, M.D.,

WILLIAM W. GULL, M.D.,

*Cholera Sub-Committee.*

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#### ARTICLE IV.

*Hemorrhoids Treated by Nitric Acid.*—By S. WEED, M.D.,  
of Port Byron, N. Y. (From the Buffalo Med. Journal.)

DR. FLINT:—Having had under my care a patient afflicted for a good many years with hemorrhoids of an aggravated character, the treatment of which, under my hands, has been most eminently successful—much more so than I had anticipated when I commenced it, I have deemed it incumbent on me to report the same for your Journal, that the profession may be able to judge as to its applicability to similar cases.—The following is from notes taken during the progress of the treatment:—

May 15th—Was called into the country to-day, to see a Mrs. J., evidently in the last stages of anæmia, induced by hemorrhoids. Mrs. J. is a married woman, and has three or four children. Has been troubled with piles ever since, and before she was married. Has leucorrhœa, also, which difficulty she has been laboring under for a long time. Is or rather

feeble constitution. Hemorrhage amounts to from two to eight ounces per day, I should think, from accounts given by both Mr. and Mrs. J. Lips and tongue are exsanguineous; dark circle about her eyes. Countenance has a cadaverous hue; patient confined to her bed, and on the least exertion, her heart is thrown into violent fits of palpitation; hands and feet are cold, accompanied with frequent chills. Mrs. J. has been treated by a great number and variety of physicians. Former treatment has been of but little avail. Did not examine the parts to-day. Told the friends that I was not prepared to do much to-day. Ordered tonics and stimulants until I should see her again next day.

May 16th.—Visited Mrs. J. to-day, and found that my prescription had been successful in keeping her warm. Made an examination. Tumors about as large as a medium sized tomato. Blood was oozing from the exposed tumors. Great deal of difficulty experienced in voiding the *fæces*.

*Treatment.*—Had resolved upon cauterization. Made choice of nitric acid. Made a free application of the acid to the exposed tumors. Pain not as severe as I had anticipated, from the application. Patient said that she had frequently experienced more pain while at stool, than from the caustic.—Dressed the parts with a cloth moistened with olive oil. Ordered muriate of iron in sweet spirits of nitre, to correct anemia. Did not visit patient on the 17th.

May 18th.—Found Mrs. J. tolerably comfortable. Had experienced considerable pain the night following the application of the acid. Found the parts somewhat swollen. There had been no hemorrhage, although the patient had had three motions of the bowels since my last visit. Discharge considerable from the cauterized surface. This was quite purulent. She stated that she had experienced scarcely any trouble in voiding the *fæces*. Ordered simple bitters, in connection with the muriate. Also applied cloths wet with laudanum, to the tumors. After she should become quiet, or free from pain, told her to make cold applications.

May 19th.—No hemorrhage, as yet. Patient quite feeble. Less difficulty and uneasiness in voiding the *fæces*. Less discharges of pus than on the day before. Some difficulty in passing urine, accompanied by considerable pain in the loins.

Ordered sweet spirits of nitre every three or four hours, until relief should be experienced. The tinct. opii, ordered the day before, had been of much service by way of relieving pain.

May 20th.—Found Mrs. J. improving. She felt, and looked much better than at any time since I had commenced visiting her. Had a very good appetite, for the first, for a long time. Was quite cheerful. No hemorrhage. Scarcely any difficulty in voiding the feces. No difficulty in passing urine. Ordered ungt. hyd. mitius to be applied twice a day. Tonics as before.

May 21st.—Patient still improving. No hemorrhage. Very little irritation remaining. Tumors diminishing in size. Appetite quite good. Bowels somewhat constipated. Pulse more full, and less frequent. Ordered sulphur and bitartrate of potassa in molasses, to relieve constipation. Stopped the use of the ungt.

It is unnecessary for me to relate the progress made by my patient from day to day, until I dismissed her. I attended Mrs. J. some three weeks. She had no return of the hemorrhage. Her appetite remained good. When I dismissed her, she told me that all the tumor there was remaining, was one about the size of a chestnut. She had then so far recovered her health, that she was able to be about the house, and see to her own work. During the latter part of the treatment, I ordered injections of a solution of sulph. ferri, for the leucorrhœa. For the last week of my attendance, I changed the muriate of iron to the carbonate, and quinine. I have seen Mrs. J. a number of times since I attended upon her, and have found her able to attend to her domestic concerns, to do her own work, to go to the neighbors, &c., &c.

The above case I consider the more interesting from the fact that it had resisted every other treatment but the one I adopted.

I am aware that the treatment which I adopted in the above case, is not altogether new. Various writers speak of it.—But is it not too much neglected? Would not the treatment by caustics, if generally followed in severe cases, be much more satisfactory than that by astringents, &c?

October 26th, 1849.

## ARTICLE V.

*Compression of the Aorta in Uterine Hemorrhage.*—(Communicated for the Boston Medical and and Surgical Journal.)

The application of arterial pressure to arrest formidable uterine hemorrhage, is not presented here as a novelty. The merit of its introduction is probably due to the veteran Baudelocque; after him, it was adopted and recommended by Chailly; while the practice has been further confirmed by cases presented to the notice of the profession by Mr. Pretty, J. D., Brown, and many others. Still its adoption has not been in proportion to its merits; and in circumstances where it might have afforded timely succor, doubtful and hazardous experiments have often been resorted to, attended with confusion to the accoucheur and peril to the patient. It has been my reliance in numerous instances during the past six years, and with so happy results, that I have come to regard any degree of *post-partum* hemorrhage so easily controlled, as to constitute an accident of no very grave moment. It is a resort at once safe, practicable and efficient. Even when the stomach will readily tolerate ergot, and every other ordinary means can be made subservient, there is often an interval before their efficient operation can be obtained, when the patient's life is momentarily endangered by delay. At this critical juncture, compression of the aorta can be brought to bear with signal advantage, while it will not embarrass, but rather assist the ordinary efforts of both nature and art towards a favorable issue. We should by no means neglect the usual appliances at hand; but are at liberty, especially if the services of a reliable assistant are at command, to resort to the application of cold, associated with manual compression of the uterine tumor. By this means the patient's life is placed beyond jeopardy for the instant, and an extension of time is gained, in which to induce that fixed contraction, short of which no attendant could abandon his charge with any degree of intelligent satisfaction and composure.

Neither in such cases should our aim be barely to save life from the extremity of peril. There is a degree of hemorrhage, graduated by individual circumstances, beyond which it should be considered a calamity for our patients to succumb.

The shock to the system produced by extreme depletion, frequently saps the foundations of health and vigor, and opens avenues for the approach of some insidious and deadly mischief.

In relation to the *modus operandi*, the aorta should be compressed in the umbilical region just before its iliac bifurcation. At this point, after the partial descent of the uterus, there is seldom any intervening obstacle; the parietes of the abdomen lie near the spine, and readily yield on account of their flaccidity; and should any portion of intestine happen to be floating in the way, it readily eludes the touch, and the hand is at once upon the aorta strongly pulsating, and feeling under the finger like a large whip cord. The pulsations can be readily controlled by firm, steady, and not very forcible pressure; and this can be brought to bear with the greatest facility by a thumb and one finger, or any two fingers, so placed in juxtaposition as to bring the triangular space formed at their extremities to fit over the artery like a saddle, and by this means prevent it rolling from the grasp, as it is liable to do without some such precaution.

The demand for this arterial compression will of course be proportioned to the intensity of the hemorrhage and the condition of the patient; but in the event of flooding, however sudden or appalling, I believe the physician has here at ready command the key that may infallibly and safely check the flow of the vital current.

ROB'T CRANE, M.D.

Middlebury, Conn., Nov. 20, 1849.



## Part 4.—Editorial.

### ARTICLE 1.

#### FREE MEDICAL SCHOOLS.

MESSRS. EDITORS:—Under the above caption, the Editor of the *Western Lancet* devotes two or three pages of his November number, to a review of my recent introductory address in Rush Medical College. In doing so, our respected cotemporary has repeated one or two errors, which may be worthy of a passing notice. After stating with tolerable correctness, the principal topics discussed in the address, and representing the “inordinate expenses which the present system imposes on the medical student,” as the leading subject discussed; he says:—“So far as we can determine, from the language of the Lecture itself, the author is advocating a free system of medical teaching,—that is, the teachers reward shall be the *glory* of imparting knowledge ‘free-gratis for nothing.’” The first part of this sentence is correct. The address does advocate a system of Free Medical Schools—*free*, in the same sense as advocated by Dr. Alex. H. Stevens, Ex-President of the American Medical Association, in an elaborate and exceedingly interesting address before the New York State Medical Society; and which attracted so much attention that the Legislature of that State ordered the printing of a large edition for the use of its own members. Free too, in the same sense as that adopted by the Regents of the University of Michigan, who, in establishing the Medical Department of their State University, have made the the *only* charge on the medical student, a matriculation fee of *ten dollars*. But the latter part of the above quotation has not an equal claim to truth.—The address no where pretends that “the teacher’s reward

shall be the glory of imparting knowledge *free gratis for nothing*;" but on the contrary devotes no inconsiderable space to well founded considerations, showing it to be alike the duty and interest of every State to "so endow its Medical School or Schools, that the *Lecture Fees* may be *entirely* abolished."— And until this is done it advocates such a reduction of the present high rates of charging as will bring them more nearly in correspondence with the actual pecuniary resources of a large majority of those who engage in the study of Medicine. It further claims that such a reduction of the fees, or their entire abolition, would induce the student to be in less haste to terminate the period of his pupilage, and enable him to attend a greater number of courses of Lectures, and greatly enhance the amount of his medical attainments before he entered upon the practical duties of his profession. And in the same proportion, of course, would the standard of attainments throughout the profession become elevated.

Nor is this all, for the address claims, and that truly, that such a change, by removing the only foundation on which all purely country Medical Schools have rested for their patronage, viz: their *cheapness*, would rapidly concentrate the whole number of students in schools so located as to make accessible to their classes well regulated and well filled *hospitals*, duly supplied with good clinical teachers; advantages certainly no less important to the student than the mere oral instruction of the lecture room. Now, if it be desirable that the student should attend several sessions of a medical school before graduation, and if it be further desirable that he should attend such a school as can afford him true clinical instruction, not only in such chronic diseases and minor surgical operations as can be presented in a College Clinique, but also in all the graver forms of disease as they may be seen and illustrated in well sustained hospitals, then it is neither *visionary*, *ideal*, nor *utopian*, to advocate such a system or rate of charges as will ensure not only the attendance of students on such schools,

but also induce them to attend the longest possible period.— And it can require no great stretch of either reason or imagination, to see clearly that just in proportion as this object is accomplished, in the same proportion will the cause of sound medical education be advanced. What has been the experience of our friends at Cincinnati? During more than twenty years they have been struggling to sustain and build up the Ohio Medical College, located in that beautiful "Queen City of the West," with ample material for hospitals, and every collateral aid that a Medical College needs.

During the time they have had some thousands of dollars appropriated to their aid by the Legislature of their State,— have numbered among their teachers some of the ablest in America; and have uniformly enjoyed the benefit of high charges, i. e. \$15 00 per ticket, or from \$90 00 to \$105 00 for a full course. The result is, after this protracted enjoyment of all these advantages, the collection of an annual class of no more than 125 or 150 actual students; while in half the time two other schools have sprung up in the same State, and with about half the rate of charges, have secured an annual class of nearly double the number of students; and what is far worse, two *quack* schools have sprung up within sight of their own doors, well nigh rivalling themselves in prosperity. Does not such a result as this, indicate that there has been something in the management of the Ohio Medical College, which smells strongly of "*closet cogitations and speculative notions*;" something "*ideal*," or at least not very nicely adapted to the *actual* condition of things, and therefore not quite as "*practicable*" as desirable?

But suppose the Cincinnati faculty had made the important discovery announced in the last paragraph of the article in the *Lancet*, viz: "that two hundred students at five dollars a ticket, would pay just as much as one hundred at ten dollars," ten years since, and had immediately adopted it as a rule in practice, thereby reducing their fees from \$15 00 to

\$5 per ticket, does any one doubt that they would now be lecturing to a class of 400 or 500, instead of 150 students? And would there be any difficulty in determining which number would be most profitable to the faculty? The only reply which the editor of the *Lancet* has made to the arguments and positions presented in the address, is contained in the following paragraph, viz: "His proposition is, that Medical Schools should all be free; very well, let the principle be carried out. There are, no doubt, some who are not only unable to pay their tuition fees, but also their clothing, travelling expenses, board, &c. Now it is certainly necessary that provision be made for all these expenses; and as the author contemplates lengthening the sessions, it will be necessary to make tolerably ample provisions, for we have no doubt that such a school would be extensively patronized. But further than this, we would most respectfully suggest, that, after the *doctor* has been thus gratuitously educated, his bills should all be paid by the government," &c.

We suppose our logical cotemporary, in carrying out the *principle* in the same direction, would say to the State of New York, inasmuch as she has provided a system of *free* schools for the education of all her children, therefore she ought to provide them all with food and clothing, and see that their debts are paid. There would be just as much good sense in the one case as in the other. But let us see how the *principle* would look carried a little way in the opposite direction. The *Lancet* assumes that cheapening medical education degrades and injures the profession, and of course the converse also, that increasing its expensiveness, elevates and improves it. If this principle be true, then every medical school is in duty bound to charge not the trifling sum of \$15 00 per ticket, but \$30 00 at least; and the community where such schools are located, instead of providing cheap boarding houses for the accommodation of students, should always exact of them a reasonable price for every thing in relation to board and clothing.

We had been long laboring under the impression that the character and usefulness of any profession depended almost entirely on the degree of intelligence and skill of its members; and this again depended mainly on the facilities afforded for acquiring knowledge and skill pertaining to the practical duties of such profession. We had supposed that the *free* medical schools of Paris, had been chiefly instrumental in making that city the great modern emporium of medical science; while a tenacious adherence to ancient usages and high charges had sunk the formerly famous schools of Edinburgh into comparative oblivion. In a word, we had supposed it a universally admitted axiom, that the surest way to advance the character and interests of any science, art, or profession, was to increase the facilities for acquiring a thorough knowledge of such art or profession in all its scientific and practical details.

According to the doctrines of the *Lancet*, however, these are all wild delusions; mere '*closet cogitations* and speculative notions;' a mistaking of the *ideal* for the *real*; while the true mode of elevating the medical profession, is to hedge up the pathway to knowledge, and tax the student's *pockets* instead of his *brains*.

Verily, France must change her policy, and the schools of Paris must close their doors to every man who has not \$100, or \$200 to pay for each course of lectures, or the profession in that beautiful country will be speedily ruined. The only objection to free or cheap medical schools which bears the semblance of plausibility, is, that they would induce a greater number to engage in the study of medicine, and consequently add to the crowded state of the profession and all the evils resulting therefrom. But however plausible this objection may appear to the unreflecting mind, its fallacy is clearly demonstrated by experience, by analogy, and by the present actual condition of the country.

In regard to experience, we have already alluded to the marked influence exerted by the establishment of free medical schools in Paris, and on this we might rest until our opponents succeeded in demonstrating that the making of Paris the head and centre of Medical Science, had *degraded* the profession in that city and country.

But let us look a little to the experience of the profession in our own country. Previous to 1765, there was no medical school in America; and all who attended medical lectures, or became graduates, were compelled to cross the Atlantic, and spend the requisite time at the expensive schools of Edinburgh or London. This, at least, made medical education as *expensive* as the most fastidious could desire; and according to the advocates of high charges, ought to have placed the profession in the colonies on the highest eminence, as regards its honorable standing and scientific attainments. But what was its actual, its *real* condition? Dr. Nicholas Romaine, in his annual address before the Medical Society of the State of New York, in 1811, says: "It would be painful to intrude on your notice the *humble* condition of medicine, which seems to have existed for more than a century after the first settlement of this (New York) State. It could only consist of a statement of the *arts* and *intrigues* by which the practitioners of Physic succeeded in advancing their *private interests* and professional emoluments, &c." And we are told by the Independent Reflector, an able paper published in the city of New York in 1753. "that it (the city of N. Y. then containing about 10,000 inhabitants) could boast of more than *forty* gentlemen of the faculty, the greater part of whom were mere pretenders to a profession of which they were entirely ignorant."

Again, we find a law passed by the Massachusetts Colony in 1659, forbidding "*Chirurgeons, Midwives, Physicians, or others*; to exercise or put forth any act contrary to the known rules of art, in each *Mystery* and occupation, or exercise any force or violence, or cruelty, upon or towards the body of any,



whether young or old, (not even in the most desperate cases) without the advice and consent of such as are skillful in the same art, (if any such may be had) or at least, of the wisest and gravest there present, and the consent of the patient or patients, if they be *mentis compotes*, much less contrary to such advice and consent, &c." These extracts, selected from a great number that might be made, are abundantly sufficient to prove two things, viz: First, that the profession of medicine was, at that time, in an exceedingly low and ignorant state; and second, there was no scarcity of practitioners, (such as they were;) for "*more than forty*," in one city of 10,000 inhabitants, is putting them quite as thick as they are to be found at the present day, even in the vicinity of the *cheapest* medical schools. Here, then, we have as expensive a system of medical education as any could desire, and as a direct consequence, an abundance of practitioners, of whom forty-five out of every fifty were either priests or the merest charlatans.

But time passes on, and medical schools become established and multiplied, throughout the whole country, and in the same proportion the facilities for acquiring a medical education become increased, and its expensiveness diminished.--- Does the relative number of practitioners, however, increase in the same proportion! Not at all. But a far larger proportion of those who do engage in the profession, are induced to resort to the schools and gain at least respectable attainments before commencing to practice. Until it is satisfactorily shown that there is now a greater number of practitioners in proportion to the number of inhabitants, than there was of "Chirurgeons, Midwives and Physicians" in 1753, we shall assume that experience demonstrates that increasing the facilities for acquiring medical knowledge and diminishing its expensiveness, has not, in times past, either degraded the profession, or rendered it more crowded. We have said that the fallacy of the objection was shown by analogy also.

Thus the legal profession in this country, has ever been perfectly free to all who were able to furnish themselves with food and clothing during the required period of study, and could pass the proper examination at its close. No expensive collegiate courses of legal instruction have been interposed to limit the number of law students, and yet we are not aware that this cheap system of legal education has either lessened the dignity or character of that profession, or so crowded its ranks as to produce a ruinous competition in regard to the rate of charges.

The truth is, that ever since mankind have been subject to disease and injury, a class of men have existed whose business it is to endeavor to repair injuries and heal diseases; and their numbers have ever been proportionate to the population and sanitary condition of the community where they live. In the heathen and uneducated tribes of the human family, the functions of Physician and Priest are generally united in the same class of persons, while surgery dwindles to the lowest of mechanical employments. In such countries, there are no facilities for any thing worthy of the name of medical education, yet there is no proof but their *Medicine Men, Midwives, &c.*, are as numerous, in proportion to the population, as in the most enlightened countries. But in the same proportion as communities become enlightened, and the facilities for acquiring true medical knowledge are increased, in the same proportion does the profession become distinct and separate from other employments, respectable in its character, and enlightened in the discharge of its duties. This is a truth which can neither be gainsayed nor disproved. Thus, in New-England and New-York, so late as 1812, medical schools were few, being confined to Boston, New-Haven, and New-York city; and three fourths of the practitioners had never graduated, and more than half had never attended medical lectures at all. Now it is comparatively very rare that a man commences regular practice in any of these States with-

out a regular College Diploma. But in the West, and much of the South, we still find a very large proportion of those who engage in practice, doing so without ever going to a Medical College, or at most, attending but one course of lectures. In the East, their fees are moderate, the schools easy of access, and the rate of interest on borrowed money low. While in the West and South, until within the last few years, the colleges were more remote, the lecture fees one third higher, and the rate of interest on money increased one half. In short the facilities for acquiring medical knowledge, have been, for many years, one-third greater in New-York and New-England, than in the West and South. The actual result is, not an absolute increase of the number of physicians in proportion to the population, in the first named section, more than in the last; but the submission of a far larger proportion of them to a full course of study and graduation.

The great fundamental truth is, that the number of those who engage in the practice of medicine, as in every other art, or calling, or trade, is regulated wholly by the law of *demand* and *supply*. And just in proportion as you throw obstacles in the way of acquiring medical knowledge by charging high tuition fees or otherwise, you increase the proportion of those who practice without proper qualifications, and *vice versa*, without at all affecting the absolute number. Unless indeed, you assume that the greater the proportion of half qualified ones, the greater will be the absolute number required to do the business—a conclusion by no means without some foundation.

December 19, 1849.

N. S. D.

## ARTICLE II.

## PROCEEDINGS OF THE ÆSCULAPEAN SOCIETY,

*At its annual session, held at Mount Carmel, Illinois, October 31st, 1840.*

[It affords us much pleasure to lay before our readers the following abstract of the proceedings of this energetic and enterprising association. The paper containing their proceedings came to hand too late for insertion in the proper department, and we therefore insert them here.]

The society met pursuant to adjournment. The President and Vice Presidents being absent, on motion of Dr. J. J. Lescher, Dr. C. J. Miller was called to preside.

The roll being called, Drs. Miller, J. Lescher, J. J. Lescher, J. B. McCarthy, J. M. Logan, and W. B. Norton, answered to the call. The minutes of the previous session, read, and on motion adopted.

Essays being called for, Dr. J. J. Lescher begged leave to read one on Dysmenorrhœa; in the course of which he endeavored to establish the frequent and annoying complication of painful menstruation with rheumatism, or rheumatic-gout, or in other words, the disease as it manifests itself in a rheumatic, or rheumatic-gouty habit—as is so admirably portrayed by Dr. Rigby.

He also adverted to the magic-like influence of such remedies as Guaiacum, Colchicum, Iod Potass, &c. as is so happily observed in this complication. Upon concluding the essay, it was ordered to be filed.

The Censors being absent, the President appointed the following to serve temporarily, viz: Drs. J. Lescher, J. J. Lescher, and Norton.

Dr. J. J. Lescher reported a case of cholera-morbus, which was filed.

Dr J. J. Lescher, in behalf of the board of censors, reported that Dr. Washburn, of Grayville, had made application for membership, and had upon examination shown himself as properly qualified for admission, and would therefore move that he be admitted; whereupon he was unanimously elected a member.

The Treasurer made his annual report, which was approved.

Dr. J. J. Lescher preferred the following charges and specifications of unprofessional conduct against Dr. David Adams, ex-President of this association, which were ordered to be spread upon the minutes. The motion being made to expel him, the charges were laid over until the next regular meeting, for final action.

*"To the officers and members of the Æsculapean Society.*

GENTLEMEN.—As it is a moral and bounden duty, as well as a high privilege, for each individual member of this association, to watch and foster its interests as an associated body, whose object is to elevate the standard of professional education and intercourse between its members, and to protect every principle calculated to promote its respectability; it is none the less obligatory on us to watch with a jealous eye, every and any violation of its rules of its ettiquttic government, by one of its body.

Such a right being unquestioned, I hesitate the less, inas-much as I am a junior in this body, to bring to your notice a most flagrant and barefaced violation of one of the fundamental rules of the code of Ethics, as adopted by the society, by one of its members as will appear more plainly in the charges &c., which follow. The character of the charges, gentlemen, as I conceive, are of no trivial nature, but on the contrary, such as demand our most serious and determined action; calling for such prompt and just men s, as will in future, effectually prevent a similar infringement, alike disgraceful to the offender, and pernicious to this society in its professional

bearing. The consequences resulting from his misconduct are calculated to reflect upon every member of this institution, unless we publicly disavow him and his act; for otherwise we become a by-word and reproach in the mouth of every respectable practitioner of medicine, and totally unworthy the name of physicians. In the capacity of President of this society, he shamefully compels us to endorse an act, for which we entertain the most marked contempt. But to the matter in hand.

Charge 1st.—D. David Adams has been guilty of violating the 14th rule of our code of ethics

Specification 1st.—The said Dr. Adams did, whilst removing to the South, in the month of January or February last, in the language of the rule referred to, “contribute to the circulation of a secret nostrum,” by his act of publicly certifying to the ascribed virtues of a certain Dr. Foot’s ‘Specific for Cholera and Diarrhoea,’ the same certificate appearing in the ‘Cairo Delta,’ a copy of which is herewith transmitted.

Specification 2nd.—In the certificate aforementioned, he does not alone praise the virtues of the nostrum, but alludes to the high standing and gentlemanly character of the nostrum-monger. He says, “Dr. Foote is a gentleman, and makes no pretensions in which he is not sustained by facts,” concluding with the wish that “should his (Dr. F.) lot be cast where the disease (cholera) prevails, his great success on board the steamer Pike No. 8, would justly entitle him to the confidence of the public.” In this he is not satisfied with lauding a specific, at best a dangerous resort for so formidable a disease; but to command the greater confidence of the terror-stricken public, he increases the enormity of the offence, by parading the charlatan.

Charge 2nd.—He has, in his vainglorious fondness or professional notoriety, brought into disrepute the professional dignity of the association, which, by an act of incorporation,



should, to say the least of it, command some respect; whose avowed object, amongst others, is to discourage quackery.

Specification 1st.—In the said certificate, he betrayed his assumed official connexion with this society, by which act, we are without our knowledge or consent, drawn into the same silly and gasconading category with himself. Sharing alike with him the just reproach of giving countenance to mountebanks, whose only object is, to rob the credulous and panic-stricken of their money—whose end is, the destruction of human life.

Specification 2nd.—In affixing to his name the title of President, &c., at the time of his certificate, he was guilty of falsehood, of a titular fraud, unbecoming a gentleman and an ex-President of this body; because at the period alluded to, his term of office had expired two years, of which he was not ignorant.

These, gentlemen, are the charges which I feel myself bound to submit to your consideration, trusting, with all due deference, that due justice will be awarded to the offending one. Appealing to your high sense of honor and professional dignity, I entertain not a doubt, but that you will make a deserving and fearless example of the person who dares in his vanity, to degrade his brethren in the sight of strangers; and who is so reckless of truth as to pen to his importance, a filched title.

[Signed,]

J. J. LESCHER."

A communication from Dr. George, giving his reasons for absence, was read.

A letter from Dr. E. A. Guilbert, Sec'y of the Med. Chirurg. Society, on the subject of a State Medical Convention, read; and on motion of Dr. J. J. Lescher.

*Resolved*, That this society approve of the project of establishing a State Medical Association; and that this society appoint two delegates to attend the Convention to be held at Springfield, when called.

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*Resolved*, That the Secretary enter into correspondence with the Secretary of the Ottawa Med. Chirurg. Society on the subject.

Dr. Miller reported an interesting case of Pleuro-Pneumonia, which elicited much discussion.

Dr. J. J. Lescher gave notice, that he would prefer charges of fraudulent conduct against Dr. Charles H. Harrison.

On motion, the Society adjourned to 8 o'clock, P. M.

#### WEDNESDAY, 8 o'clock, P. M.

The society met pursuant to adjournment, Dr. Miller in the chair, the roll being called, all present as at the morning's meeting, with the addition of Drs. Sam'l Thompson, James Mahon, and J. Somes.

Dr. J. J. Lescher, in pursuance to notice, read specified charges against Dr. Harrison, an abstract of which was ordered to be spread on the minutes, in words to wit :

[Here follows a series of charges which are of so grave a character that we think best to omit them. If true, they make the accused guilty of a misdemeanor in the eye of the law. They specify a failure to make returns of an agency for periodical publications, which amounts to a breach of trust. But how many men are there in community who are equally guilty of failure to pay over to their creditors, what properly belongs to them, and which, of course, is justly theirs?]

Inasmuch as Dr. Harrison's whereabouts was unknown, on motion, the 21st rule of the by-laws was suspended, whereupon the society proceeded to consider the charges, and he was, by a unanimous vote, expelled.

Dr. Thompson made a lengthy and highly edifying report of a case of Intermittent Neuralgia, successfully treated by

repeated and large doses of Quinine, conjointly with other judicious remedies.

On motion, the society went into the election of officers for the ensuing year, which resulted as follows :

Dr. Samuel Thompson, President.

Dr. Charles J. Miller, 1st, and Dr. Logan 2nd Vice President.

Dr. W. B. Norton, Secretary.

Dr. J. J. Lescher, Treasurer.

Drs. Banks, Hamilton, and Washburn, Censors.

On motion, Drs. Thompson and J. J. Lescher, were appointed as delegates to attend the State Med. Convention.

A motion to alter the 13th rule of the by-laws, was made and lost.

On motion, the Treasurer was instructed to notify all delinquents of their arrearages, and to urge them to immediate settlement.

The following resolutions were offered by Dr. Logan, which, on motion, were adopted.

*Resolved*, That any member failing to attend for four successive meetings of this association, shall be liable to censure, suspension or expulsion, to be determined by vote of the society.

*Resolved*, That any member being in arrearages to the amount of two dollars and fifty cents, for initiation or certificate fees, assessment or fines, shall be suspended and not allowed to vote or speak in this society, until said arrearages are paid.

On motion, the society adjourned to meet to-morrow morning at 9 o'clock.

THURSDAY, Morning, Nov. 1st, 1849.

The society met pursuant to adjournment, present the same as yesterday, Dr. Thompson in the chair.

On motion of Dr. Washburn, Drs. Thompson, J. J. Lescher, and Logan, were appointed a committee to draft an ad-

dress, to be sent to each member of this society, one month prior to each meeting. The committee after retiring for a short time, reported a form which was adopted.

Dr. George Lescher's application for membership being reported by the board of Censors; he was unanimously elected a member of this society.

The following appointments were made:

Drs. Mahon and Hamilton, to deliver addresses.

Drs. McCarthy, Washburn, Banks and George, to read essays.

On motion, the Secretary was instructed to furnish a copy of the proceedings of this society to the "Mount Carmel Register" with the request, that the following papers copy, viz:

"The North Western Med. and Surgical Journal," "Vincennes Gazette," "Southern Illinois Advocate," "Olney News," "Lawrenceville Banner," and "Marshall Democrat."

On motion, the society adjourned to meet at Lawrenceville on the last Wednesday in April next.

SAMUEL THOMPSON, President.

W. B. NORTON, Secretary.

### ARTICLE III.

#### OFFICIAL CALL FOR A STATE MEDICAL CONVENTION.

Office of the Secretary, of the  
Ottawa Medico-Chirurgical Association. }  
18th December, A. D., 1849. }

*Editors North Western Medical and Surgical Journal.*

GENTLEMEN:—At a regular meeting of the "Ottawa Medico-Chirurgical Association," held at the rooms thereof, on the evening of Monday, the 17th inst., Dr. Edward A. Guilbert offered the following preamble and resolutions, viz:

*Whereas*, it has been deemed advisable by sundry medical gentlemen, that an *official* call for a Convention of Physicians

to assemble at Springfield, Ill., at some future time, for the purpose of forming a State Academy of Medicine, should be immediately made: and *whereas*, it is esteemed very proper for those who have originated the movement, to make said call, Now therefore, be it

*Resolved*, That the "Ottawa Medico-Chirurgical Association" respectfully, and earnestly recommend that a State Medical Convention, convene at the Capital of the State, on the *first Tuesday* in June, A. D., 1850, for the purpose of forming a "State Medical Association."

*Resolved*, That this (the Ottawa Medico-Chirurgical) Association, do hereby call such a Convention; and that these preamble and resolutions be signed by the President and Secretary of this body, and transmitted to the "North Western Medical and Surgical Journal," for publication.

On motion of Dr. D. D. Morrison, it was further

*Resolved*, That a Committee of conference, consisting of three members of this Association, be appointed to correspond with the Physicians of Springfield, in reference to the arrangements incident to the convocation of said Convention.

These resolutions were adopted, and Drs. D. D. MORRISON, EDWARD A. GUILBERT, and JONATHAN PIERSON, were appointed the committee proposed in the last resolution.

[Signed,]

A. H. HOWLAND, M. D.

*President.*

EDWARD A. GUILBERT, M. D.

*Secretary.*

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#### ARTICLE IV.

##### ILLINOIS STATE MEDICAL CONVENTION.

We heartily approve of the convention of the physicians of this State which is called to meet on the first Tuesday in June next, at Springfield, and hope our professional friends

throughout the State will promptly engage in the enterprise and make arrangements to give the meeting a full attendance. It will come at a season of the year when the country is generally healthy, and in this respect the time will be opportune, unless we should again be visited with the cholera. The roads are generally good and the weather pleasant at that season, so that few obstacles will be in the way, and we may hope to see a large delegation of physicians from all parts of the State.

Mutual acquaintance, the promotion of harmony and concert of action, fostering friendly feeling and good fellowship, mutual improvement by interchange of sentiment, and organization for the promotion of the common interests of the profession, may be objects of little importance to some, but we are sure that a large portion of the intelligent members of the profession in Illinois love their calling and its high and benevolent aims too well to lightly regard or neglect them. Besides it is the opinion of the profession of the United States as expressed through the National Medical Association, that such organizations should be formed. E.

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#### ARTICLE V.

##### APPOINTMENT OF DEMONSTRATOR OF ANATOMY IN RUSH MEDICAL COLLEGE.

In compliance with the unanimous opinion of the Faculty of Rush Medical College, that evidence of a knowledge of, and ability to teach any branch of the Science of Medicine, should constitute the principal test in the selection of Professors and Teachers in our Medical Schools: it is determined to fill the situation of Demonstrator of Anatomy, in this Institution. (recently made vacant by the resignation of J. B. Herrick, M. D.,) by appointing the Candidate, who, in the judgment of the Faculty, shall have complied to the greatest ex-



tent, and in the best manner, with the following requisitions, viz :

Who, on or before the 1st of March next, shall have furnished the undersigned with a written application for the situation, accompanied by the most satisfactory testimonials as to character, knowledge of medicine in general; and of Anatomy in particular.

Who, on or before the 1st Monday in June next, shall have prepared and furnished as above, the best specimens.

Of Dried or Wet Preparations showing the Conformation and structure of bones, the Distribution of Blood-Vessels Nerves, or Lymphatics of any Part or Organ; Moulds in Plaster, Wax, or other material, of whatever nature, showing the Conformation or Structure of Parts or Organs, either in Human or Comparative Anatomy.

Who, on the 1st Monday in June next, or during the week following, on such day as shall be appointed by the undersigned, shall most skilfully dissect some region of the body, and make the best demonstration of the same before the Faculty; the region dissected and demonstrated, to be determined by lot, from a number to be designated at the time.

The award to be made by the Faculty, and such others as they may appoint to take the place of absent Members.

Certificates of Comparative Merit will be given to unsuccessful Candidates, if desired.

W. B. HERRICK, *Professor of Anatomy.*

Chicago, December 1, 1849.

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#### ARTICLE VI.

##### THE CONCOURS.

It will be observed by the foregoing notice that the recommendation of the National Medical Association so unanimously adopted in reference to the appointment of Teachers is to

be complied with by one medical School at least. Thus, Rush Medical College will be first in the United States, to hold a public concours or trial, for the selection of a Medical teacher, but we opine she will not be the last.

Among the important recommendations of the National Medical Association, none it seems to us will be more likely to control the rapid multiplication of Medical Schools, and improve the character of the teachers in those that are permanently organized, than this one, if it should be generally adopted. It will accomplish these ends by affording every one who has an ambition to become a teacher, an opportunity to compete for a place in a well organized school, and few men of ability would be found contending with the perplexities of getting up a new school, if such a plain road to preferment were open before them. And it will secure a great improvement upon the appointments that are often made, by enabling those who select to know something of the ability of the one selected to discharge the duties of his station. E.

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#### ARTICLE VII.

##### DR. LATTA'S CIRCULAR.

[We call the attention of our readers in Indiana, to the following circular. The subject is one of great importance, and we hope the profession will give the committee all the assistance possible in furtherance of its design. Every physician in Indiana should esteem it his duty to furnish Dr. Latta any facts he may have bearing on this point, and his opinion as to the best mode of remedying the evil.]

TO DR. E. G. MEEK:

*Dear Sir:*—At the last meeting of the American Medical Association, a Committee of two from each State and Territory was appointed, whose duty it was to “note all facts that come to their knowledge, with regard to the *Adulteration or Sophistication of Drugs, Medicines,*

&c., and to report them through the Committee at the next meeting."

In pursuance of this Resolution, DR. MEEKER, of Laporte, and myself have been appointed members of the committee for this State. Prof. HUSTON, of Philadelphia, (who is Chairman of the Committee,) in a letter notifying us of our appointment, says that the subject was deemed of the highest importance by the Association, and expresses a hope that we will investigate the matter as fully as circumstances permit, and communicate the facts to him, and such suggestions as we may think proper to add.

Agreeing with the Association in regard to the importance of the subject, and desiring to perform the duty assigned me, in a manner likely to promote the great objects in view, I have ventured to solicit your co-operation. The various Colleges of Pharmacy have entitled themselves to public regard, by their unwearied efforts to detect and expose the practice of IMPORTING bad Drugs into the country. But the evil has been domesticated. It is now, to a great extent, beyond their reach. Large quantities of Drugs that are worthless, or worse, are undoubtedly manufactured in this country; and since the passage of a law by Congress, prohibiting their introduction from abroad, the temptation to adulterate or sophisticate valuable preparations, has been greatly increased, on this side of the water. Nearly all inert or deleterious compounds, whether of Foreign or Domestic manufacture, are expected to find a Western market, and are actually consumed, by our population. Our opportunities for observation are thus rendered extensive, and if properly made use of, cannot fail in removing one of the greatest causes of mortification to the Physician, and of disaster to the suffering.

I therefore respectfully request you to inform me of any such practices as may have come to your knowledge, particularly in regard to Medicines in most common use, as the various

preparations of Mercury, Opium, Iodine, Bark, and the Essential Oils, of Nitrate of Silver, Spirits of Nitre, Strychnia, the Vegetable Extracts, &c., together with your opinion as to the best means of removing the evil altogether.

Any information on these subjects, which you may be kind enough to furnish, shall be immediately forwarded to the Chairman of the Committee, and fairly accredited.

As prompt a reply as it will suit your convenience to make, will greatly oblige

Your Ob't. Servant,

M. M. LATTA,  
Member of Com. for Indiana.

Goshen, Ind., Nov. 13, 1849.

#### ARTICLE VIII.

##### OBITUARY.

Just as we go to press we hear of the death, on the 3rd instant, of Dr. Samuel B. Woodward, of Northampton, Mass., late Superintendent of the Massachusetts State Lunatic Hospital, at Worcester. Dr. Woodward for thirteen years conducted that celebrated institution, with distinguished ability and success. His opinions upon subjects connected with insanity have had great influence throughout the United States.

#### ARTICLE IX.

##### MEDICAL MISCELLANY:

Prof. Shotwell has been transferred to the chair of *Materia Medica*, made vacant in the Medical College of Ohio, by the death of Pro. Harrison.

Seven female students are in attendance on the lectures in the Eclectic establishment at Syracuse, N. Y.

Dr. E. W. H. Ellis, of Goshen, has been elected Auditor of State, in Indiana.

The Coroner's jury of Boston, after an elaborate investigation of the cause of death, in the case of Dr. Geo. Parkman, returned a verdict accusing Prof. J. W. Webster, of the Boston Medical School, with the murder, who is committed to prison to await his trial.

Dr. Hubbard has been elected Governor of the State of Maine.

Dr. N. D. Benedict has been appointed Superintendent of the N. Y. State Lunatic Asylum at Utica, in place of Dr. Brigham, deceased.

Prof. Paul F. Eve, who has for five years edited with great ability, the *Southern Med. and Surg. Journal*, has retired from that post, and is succeeded by Dr. I. P. Garvin, formerly associate editor of the same work.—This move, we are pained to learn, has been caused by severe domestic afflictions. Our warmest sympathies are tendered him.